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ABSTRACT

Cumberland County College with a team of consultants developed a long-range plan along with a continuing planning process to assure the college's continued effectiveness. Aspects of the planning process include: review of available reports relevant to the college's long-range planning; identification of preliminary goals and objectives; assessment of county needs for postsecondary educational services; review of available educational programs in the county; assessment of community influence on planning; and projection of fiscal and other resource needs. Elements of the long-range plan include: (1) reaffirmation to fulfill the full range of community college services; (2) growth in enrollment of 10-12% a year, especially among older, part-time, minority, and women students; (3) formulation of procedures for assessment of institutional programs; (4) accomplishment of an in-depth community needs study simultaneously with the 1980 census; (5) acquisition of off-campus instructional centers; (6) expansion of non-traditional instructional techniques; (7) completion of the current capital development plan; (8) development of a cultural center; (9) increases in annual operating budgets somewhat larger than increases in enrollment; (10) stronger efforts to acquire funds for personnel, facilities, and services; and (11) movement to become a center for information exchange. Data tables are included throughout the report. (MB)

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CUMBERLAND COUNTY COLLEGE

A COURSE INTO THE '80S: DEVELOPING A PLAN AND A PLANNING PROCESS AT CUMBERLAND COUNTY COLLEGE

(A Report to Cumberland County College Planning Committee, Administration, and Board of Trustees)

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January 30, 1978

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TABLE OF CONTENTS

PAGE

Letter of Transmittal iii

Acknowledgments iv

List of Tables vi

List of Figures ix

CHAPTER

I Executive Summary: Overview of Plan and Planning Process, Conclusions, and Recommendations 1

II Cumberland County College Faces A New Reality 13

III Planning As A Process 24

IV Goal Definition and Refinement 33

V Cumberland County Community Needs For A Community College 44

VI Programs to Meet People's Needs 113

VII The Setting For Planning 134

VIII Plans Call For Resources 150

Appendix A - Cumberland County College Planning Committee 169

B - Fifteen Broad Goals for Cumberland County College Seen by Community and College Leaders 170

C - Rank Order of Goal By College Planning Committee, By Level of Aspiration and Achievement at the College 173

D - References Cited in Report 176

LETTER OF TRANSMITTAL

ace
associated consultants in education
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January 30, 1978

Dr. Philip S. Phelon, President
Cumberland County College
Vineland, New Jersey

Dear President Phelon:

On behalf of Associated Consultants in Education and members of the consultant team who worked on this project, I am pleased to present with this letter a final report as called for under our contractual agreement with Cumberland County College. We believe that the College successfully accomplished the intent of this project, namely, to initiate a continuing planning function, structure, and process. The recommendations advanced indicate ways that the College can now continue, build on, and refine this beginning achievement.

The first chapter of the report is presented as an executive summary and was prepared as an aid to persons whose interest in the project is a general one, focusing essentially on its overall design, major observations, conclusions, and recommendations. The chapters which follow provide background, supporting material to our conclusions and recommendations, and elaborative discussion organized broadly around the six major tasks to which, according to our agreement, the consultant team and personnel of the College were to address their efforts.

As stated in the acknowledgments, we are deeply grateful for the positive and strong cooperation given this project by the college and community officials who were asked to assist in it. The affirmative reaction shows the esteem of the College in the community and the dedication to it held by its staff.

Consistent with the policy and practice of Associated Consultants in Education, we stand ready to assist in a continuing way to help the College get the fullest possible use and further positive development from this planning effort. If further service can be provided, please let me know.

Sincerely yours,

S.V. Martorana

S.V. Martorana
Project Director

SVM:dkt
cc: Members of Consultant Team
Dr. Hazen A. Curtis, Executive Director
Associated Consultants in Education

ACKNOWLEDGMENTS

Many persons and organizations helped in this effort to develop a long-range plan and to establish a continuing planning process at Cumberland County College. To list specifically by name all who were involved is not possible within the space of a brief expression of appreciation in a document of this kind. Beyond expressing a general thanks to all who helped, however, the consultant team wishes to express appreciation to those who participated in major special ways. Among those who merit such notice especially are the members of the College Planning Team, and the staff members of the College who helped in getting essential information. President Phelon's support was present and felt throughout. The work done on special assignments by Dean Adelaide Van Titus, Director Christine Ward, Dean William Marts, and Dean Thomas Henry helped significantly. Librarian Florence Volpe directed our attention to helpful documentary sources of information about the College and its community. Officials in local business, industry, government offices, and professional practice were most cooperative in our requests for goal statements, interviews, and related information. The Cumberland County Planning Board and its director, John J. Holland, provided quantities of demographic and economic planning data. County Superintendent of Schools, John O. Berwick, similarly provided information on school enrollments and local tax bases, and arranged for the fine work done by Miss Deborah Sawamura. From the state offices helpful responses to requests for information came from Edward D. Goldberg, Director, Office of Community College Programs, and Howard F. Miller, Associated Director, Office of State Colleges, both of the New Jersey Department of Higher Education.

As a research assistant throughout the project, Ricardo L. Reyes' work was thorough, exhaustive, and of high quality. Mrs. Deborah Trout handled all secretarial and typing duties as well as a large part of the editorial work connected with this final report. To all these and the many more not named here, we say, "Thank You Very Much!"

LIST OF TABLES

(By Chapter and Table Number)

TABLE		PAGE
IV-1	Broad College Goals Cited in Unit and Committee Statements of Objectives	40
IV-2	Coverage of Planning Elements in College Committee and Operating Unit Statements of Objectives	42
V-1	Population Changes: U.S., New Jersey, Cumberland County, 1920-75	47
V-2	Major Age Groups and Percent of Total	49
V-3	Age Groups as a Percentage of Total Cumberland County Population, 1960-1970	50
V-4	Age Groups as a Percentage of Total Cumberland County Population, 1974-1976	51
V-5	Population by Municipality for Selected Years	53
V-6	Comparison of Participation in Employment Sectors by White and Black Workers--1970	60
V-7	EBI Rating Comparison for Cumberland County for 1974 and 1976 with 1976 compared to New Jersey Households	62
V-8	Number and Percentages of 25,590 Pupils in Cumberland County Public Schools, September 1977, By Grade Groups, Location, and Race	67
V-9	Cumberland County College Student Enrollment Profile, Fall 1976 Semester	69
V-10	Rank Order of Youth Survey Career Choice, By Major Area Chosen	72
V-11	Rank Order of Area By Two-Year College as Choice of Training Institution	73
V-12	Rank Order of Career Area Chosen By Those in Grade Nine Who Also Chose Two-Year College	75

LIST OF TABLES
(continued)

TABLE		PAGE
V-13	Rank Order of Career Area Chosen By Those in Grade Ten Who Also Chose Two-Year College	76
V-14	Rank Order of Career Area Chosen By Those in Grade Eleven Who Also Chose Two-Year College	77
V-15	Fields Most Frequently Chosen in Boy Scout Career Interest Survey	78
V-16	Top Fields Within Major Areas By Those Already in Existence at Cumberland County College as a Program	82
V-17	Existence Within Cumberland County College Program of Fields of Specialized Interest Falling in Upper Quartile of Choice Expressions in Youth Interest Survey; By Major Area of Specialty	83
V-18	Rank Order of Areas Chosen By Students Interested in Vocational-Technical School	85
V-19	Rank Order of Areas Chosen by Students Interested in a Four-Year College	86
V-20	Youth Career Interest Survey, Choices by Sex and Location	87
V-21	Cumberland County Planning Board and New Jersey Labor and Industry Population Projections for Cumberland County	96
V-22	Revised Population Projections for Cumberland County	98
V-23	Population Centers in Cumberland County	101
V-24	Percentage Changes in Cumberland County Population, Total and by Selected Age Groups, 1960-1990	106
V-25	Population Projections Related to Potential Total Fall FTE Enrollment	109
VI-1	Current Organized Offerings at Cumberland County College by Rank Order of Percentage of Full-time and Part-time Enrollment	115
VI-2	"Strongest" Enrolled Program Offerings at Cumberland County College	116
VI-3	Unique and Special Programs Offered by Cumberland County College in New Jersey	118

LIST OF TABLES
(continued)

TABLE		PAGE
VI-4	Participation-Vineland High School Adult Education Program	123
VIII-1	Percentage Distribution of Educational General Expenditures, New Jersey and Cumberland County College	165
VIII-2	Cost Support at Cumberland County College	165

LIST OF FIGURES

(By Chapter and Figure Number)

FIGURE		PAGE
II-1	Cumberland County College Table of Organization, 1977-78	21
III-1	Action and Reaction in the Planning Process	31
V-1	Population Distribution, Cumberland County, New Jersey 1970 U.S. Census	55
V-2	Geographic Sectors of Cumberland County, New Jersey	56
V-3	Employment by Sector	58
V-4	Megalopolis Influence on Cumberland County	92
V-5	Cumberland County Planning Board and New Jersey Labor and Industry Population Projections for Cumberland County	97
V-6	Revised Population Projections for Cumberland County	99
V-7	Gross Population of Centers in Cumberland County	102
V-8	Center of Population as Percentage of Total County Population	103
V-9	Percentage Comparisons of College Enrollment and County Population for Blacks and Spanish Sub-Groups	105
V-10	Enrollment Projection - Low	110
V-11	Enrollment Projection - Medium	111
V-12	Enrollment Projection - High	112

CHAPTER I

EXECUTIVE SUMMARY: OVERVIEW OF PROJECT, CONCLUSIONS, AND RECOMMENDATIONS FOR PLAN AND PLANNING PROCESS

During the past nine months, Cumberland County College engaged in an undertaking designed to build on its past successes as an institution and to assure its continued effectiveness in serving the postsecondary educational needs of the County. Decision to establish a basis for a long-range plan and to launch a continuing planning process as a specific aspect of the college's operation reflected the confidence of its leaders that,although established only fifteen years ago, the institution had achieved a maturity sufficient to permit a close look at its past accomplishments and likely future conditions; furthermore, the action showed the leadership's awareness that the College would likely face a set of circumstances during the decade ahead quite different from those which existed from 1963 to the present time.

To implement this decision, the College agreed with a team of associated consultants, the authors of this report, to accomplish cooperatively six tasks considered to be essential to develop a college long-range plan and to establish the continuing planning function. These were: (1) search for and review already available documents, reports, and compiled information having relevance to long-range planning at the College; (2) identify preliminary goals and objectives; (3) assess needs of the County for postsecondary educational services as indicated by available information; (4) review scope of postsecondary educational programs currently available in the County and identify areas of possible new programs at the College; (5) assess the setting for planning in terms of community forces bearing on the College; and (6) project fiscal and other resources the College will need in the next five to ten years.

Description in considerable detail of the accomplishment of the six tasks is provided in the chapters which follow this executive summary. The purpose here is to describe succinctly the elements of a long-range plan for Cumberland County College that have emerged from the project to date, and, as a basis for deeper understanding of this initial plan, to state the conclusions reached by accomplishment of the six tasks, to identify some options the College may take on certain planning issues, and, more pointedly, to advance a number of recommendations which, in the judgment of the consultant team, will, if implemented, set a sound course for the College during the next five to ten years.

Elements of a Long-Range Plan

If the conclusions and related recommendations which follow are accepted and acted upon, Cumberland County College's course into the 80s will be marked, among other developments, by:

---A reaffirmation of intent to fulfill the full range of services to individuals and the supporting community characteristic of a public comprehensive community college.

---A growth in enrollment of 10-12 percent a year, with much of the growth accounted for by older students enrolled part-time, by persons from minority segments of the population, and by women.

---Enunciation of an institutional policy in support of planning as a continuing administrative function at the College along with concomitant establishment of a definite structure and process for planning and with strong reliance on wide participation in the process by representatives of the full range of college constituents---trustees, administration, faculty and staff, and students.

---Formulation of policies and procedures for periodic assessment of institutional programs and practices against established goals and objectives.

---Accomplishment of an in-depth community needs study simultaneously with the 1980 census and cooperatively with the County Planning Board.

---Acquisition of centers for instruction at one or more places off-campus to bring the College and its services closer to citizens' homes and places of work.

---Expansion of use of non-traditional techniques of instruction and student study as alternatives to conventional ways to earn academic credit.

---Completion of the current capital development plan at the main campus.

---Development of a cultural center to serve both the community at large and related academic programs at the College.

---Movement by the College to become the center for information exchange and "brokering" of postsecondary education programs and services in Cumberland County.

---Increases in annual operating budgets somewhat larger than increases in enrollment, reflecting the effect of inflation trends and a number of other factors.

---Stronger institutional efforts to acquire funds needed to acquire personnel, physical plant and equipment, and related resources needed to support programs and services.

Conclusions

From the several activities of this planning project, a number of conclusions about the college's status, circumstances, programs, and needs are drawn. Stated topically according to the main sections of the rest of the report they are as follows.

Regarding Institutional Background, Development to Date, and Policy Re: Planning

1. The College is building its future and now rests on a solid past--a success record.

2. The College is well respected as a comprehensive community college in the County, Region, State.

3. Until very recently long-range planning received relatively little attention as a function of institutional leadership and management.

4. The College has made a good start in long-range planning in its recent efforts to define its mission, broad goals, and objectives; continued refinement of these, however, is still needed.

Regarding the Current Institutional Setting, Climate, and Capacity for Planning

1. Conditions surrounding Cumberland County College and postsecondary education generally require careful and effective planning.

2. A general state of "readiness" exists to accept and embark upon a sustained effort to make long-range planning a recognized and continuing element in institutional development and decision making.

3. The current structure for administering the College needs to reflect more strongly a means to draw on and nurture the college's emerging interest in long-range planning and to deploy this interest along with related resources to the institution's continued and improved operation.

Regarding Community Needs for Postsecondary Education

1. The general level of need for postsecondary education in Cumberland County and its surroundings will grow in the decade ahead because the total population of the area is expected to grow.

2. Viewed in a less global fashion, there are evident a number of special groups within the total population of Cumberland County whose need for postsecondary educational services deserve special attention now and during the years just ahead: these groups are:

   ---those economically disadvantaged
   ---members of Black and Spanish-speaking minorities
   ---unemployed youth and young adults
   ---persons retired from active work
   ---women from all sorts of home, social, economic, and cultural backgrounds

3. The general population and the sub-sets of population needing postsecondary education will be increasingly seeking it as a part-time rather than full-time activity in their lives.

4. Populations clustering around the three major centers in the County (Vineland, Millville, and Bridgeton) will have overlapping but not completely similar postsecondary educational needs; the three centers, therefore, need constant study to keep college services to each one current and effective.

5. Within the general adult population (persons over 18 years of age, high school graduates and non-graduates) are individuals who range widely in the type of postsecondary educational service they need; this diversity is evident both with respect to broad fields (liberal studies, occupational preparation, personal development, etc.) and to levels within given fields: for example, in occupational preparation exist such levels as artisan and clerical training, technical and para-professional training, and professional preparation. To be fully served, therefore, the county's and region's population need a plan, structure, and process whereby all of the particular individual needs will be accommodated.

6. Employers in Cumberland County are sensitive to and appreciate the role the College plays in providing trained manpower for their needs; moreover, they are coming increasingly to expect this service from the College.

Regarding Programs and "Modus Operandi" to Meet Postsecondary Educational Needs

1. Currently, and for the foreseeable future, a number of institutions are seen to be engaged in postsecondary education in Cumberland County; they are: Cumberland County College, Glassboro State College, Stockton State College, Edison State College, the Cumberland County Vocational Education Center and several local public school systems.

2. Collectively, the several institutions already engaged in postsecondary education in Cumberland County can meet adequately nearly all of the people's needs for this level of education; the exceptions are advanced graduate study and such high-cost, highly specialized professional fields as medicine and law.

3. Cumberland County College currently is clearly the recognized center for preparation of personnel to be engaged in technical, para-professional, and middle management duties in the work force.

4. Articulation and coordination of programs offered by the several institutions engaged in postsecondary education in the County are occurring on a haphazard basis which suffers from an ambiguous designation of leadership, responsibility, and authority as well as lack of communication among the institutions involved.

5. Instructional programs offered by Cumberland County College currently are almost totally campus based and conducted in conventional modes of academic practice.

6. Activities and programs contributing to the general cultural enrichment of the citizens of the County are limited in scope and popular availability.

Concerning the Setting for Planning

1. In Cumberland County a "complex of interests" in Cumberland County College exist and the tensions, both positive and negative, that develop within and among these interests with respect to the college's future need to be known and taken into account in its planning processes.

2. Key positive forces include, the reputation the College enjoys as an excellent academic institution, its known record for efficient use of its resources, the strong evidence that population in the County will grow during the decade ahead, the strengthening call from state-level officials for basic planning by all colleges in the State, and, very importantly, the caliber of its staff.

3. Some important negative forces are the somewhat depressed condition of the economy in Cumberland County, the currently evident task of promise for increases of fiscal support for the College from either state or local tax sources, the general trend of inflation, and the increasing costs of maintenance and operation because of the costs of energy and related items.

4. Some potentially negative forces include the prospects of intense institutional competition to enroll adults interested in postsecondary education by all of the several collegiate institutions and school systems in the County.

Concerning Financial Support and Resource Acquisition

1. Cumberland County has an outstanding record in managing fiscal and other resources efficiently.

2. Prospects for increases in the proportionate share of operating costs borne by state tax sources are dim.

3. Local level government officials are reluctant to increase local taxes.

4. Higher direct charges to students (tuition and fees) tend to defeat the basic educational purposes of a public community college to serve students of divergent interests and all economic levels.

Options in a Course into the 80s

The usual case found, when an institution established to serve a social purpose like postsecondary education considers its future, is that several courses of action are possible within the circumstances expected to prevail and without a gross violation of the institution's general mission. This is true for Cumberland County College at this point in its long-range planning effort. The options seen by the consultant team in each of the major areas of college operations considered in the project are presented below.

College Options Related to Programs

The choices open to Cumberland County College with regard to the scope of programs offered are these:

1. Continue in its past and current commitment to provide the full array of postsecondary academic programs and services permitted by New Jersey Statutes and typically associated with public comprehensive community colleges--specifically, occupational, university parallel (lower division), general education, and community services, programs along with extensive assessment and counseling services for all students.
2. Delimit the scope of its curriculum to give emphasis only to selected types of programs from those shown in the option stated above, for example, university parallel (lower division) and general education, and, either simultaneously or alternatively, limit the scope of offerings with the types listed, for example, within occupational programs to concentrate on certain fields (health, business, etc.) and on a certain level (technical, paraprofessional, and mid-management as opposed to clerical and artisan).

College Options Related to Academic Operations

The consultant team concludes that two choices for Cumberland County College are feasible in the realm of academic operations. They are:

1. To continue the past and current emphasis on campus-based offerings and essentially traditional modes of instruction.

2. To adopt a more "open and extended" mode of operations which would move some academic courses (even entire programs) to locations other than the college campus and to adopt both on the campus and at extended locations new techniques of instruction.

The option of a radical movement to a fully "community-based" academic operation is rejected by the consultant team as a viable option. To do that would risk too much a loss in the many advantages the campus provides as a base not only as a headquarter for a comprehensive community college program but also as the place where special support needed by many of the courses offered can be best provided.

College Options Related to All Postsecondary Education in Cumberland County and the Region

With respect to its relationships to the total array of needs for postsecondary education evidenced by the people of Cumberland County and the interests and enterprises in which they are engaged and to the several other educational institutions and systems in the County, the College has these options:

1. Maintain an essentially college-centered stance whereby it takes initiative in assessing community needs and developing programs related to needs as these are seen to fall within the defined scope of educational service of a community college.
2. Adopt a more broadly viewed community-centered posture whereby the College not only takes initiative in assessing community needs and developing related community college programs and services, but also exerts initiative to encourage development of other types and levels of needed postsecondary programs as well as to bring about a planned and coordinated availability of all of the postsecondary educational programs offered in the County.

College Options Related to Fiscal Support and Resource Acquisition

In the realm of fiscal support and resource acquisition, the realistic options open to Cumberland County College during the next few years appear quite narrow and restricted. Singly or in combination of several, these seem to be the possibilities:

1. Launch a major effort to get more financial support from state tax funds, striving for regular and reliable increases into the next decade.

2. Embark on a similar major effort to get more financial support from local tax funds.

3. Plan on a progressive shift of cost burden to the students enrolling in college courses and all persons seeking services provided by it.

4. Attempt to expand the amount of revenues received from federal programs.

5. Seek more revenues from private sources provided in gifts and grants.

6. Plan an effort to get increases in support from all three governmental levels (local, state, federal) and from private sources (other than students) and rely on increases in student charges only as necessary to balance annual operating budgets.

Recommendations

Based on its examination of Cumberland County College and the circumstances within which the College will likely be operating during the next 5-10 years, the consultant team offers the following recommendations:

Long-Range Planning and the Planning Process

1. The College should make the planning activities of the past nine months a basis for establishing a sustained and continuing long-range planning program on which to found both broad policy major operational decisions and procedures.

2. A regular structure and procedure for long-range planning should be adopted; within this should be a standing all-college committee and a specially designated office to provide continuity and coordination to the planning process.

3. Decisions made in developing annual budgets should be viewed as tactical planning and made within the context of approved long-range plans that reflect strategic decisions about the scope and direction of the college's future development.

4. Periodic evaluations of organizational units and academic programs should be conducted in ways which relate each aspect of the College to its established goals and objectives.

5. Leadership responsible for the planning function at the College should start now to arrange for an in-depth community needs assessment at the time of the 1980 census as a cooperative venture with the Cumberland County Planning Board.

6. The planning process should produce a working, continuing long-range plan on a regular cycle (at least every five years) and should include a regularly adopted procedure to be followed by college units in proposing amendments to the plan between points of periodic update.

Academic Operations

1. The College should move to offer selected academic courses and related educational services at extended locations in Cumberland County, including places of business and industry.

2. Both on campus and at extended locations, the College should adopt more "open and non-traditional" methods of instruction including use of communications media, independent study, and use of community-based resources that have educational applications.

3. A program of faculty and staff development focusing on developmental studies, adult learning, and evaluation in relation to planning should be undertaken.

4. The College should formulate and adopt an official policy to guide faculty and staff in their role of community service and outreach and for use in faculty and staff decisions about workload and related personnel determinations.

Program Level, Scope, Emphases

1. The College should attempt to continue to provide the full array of postsecondary educational programs and services typically associated with public comprehensive community colleges.

2. The College should move forward with plans to develop a cultural center for the County and, on a shorter time frame, should add activities more directly associated with Black and Hispanic cultural interests and heritage in planning future events in its Celebrity Series.

3. Programs of occupational preparation and community services should be expanded to meet the special postsecondary educational needs of particular groups of the population in Cumberland County; these include: economically disadvantaged persons, minority racial and ethnic groups, older citizens, and women.

4. Possibilities should be explored of programs that serve both to help meet needs of special groups of students and manpower needs of the economy, for example, programs to train day-care center workers which build on day-care centers to help adult women attend the College.

5. To meet the broad requirements for trained manpower in Cumberland County, the College should plan to retain its present spread of occupational programs of technical, para-professional, and mid-management level: more specifically, attention should be devoted to strengthening program offerings in the broad fields of health, business, and technologies related to light industry, agri-business, and foods processing.

6. Cumberland County College should move to become the center for organizing and offering in the County public forums for adult citizenship development as recommended by the 1977 Assembly of the AACJC.

Relationship to all Postsecondary Education in County

1. Cumberland County College should take initiative to determine the total postsecondary educational needs of the people, businesses, and industries of the County on a systematic and regular basis; in this effort cooperation of the Cumberland County Planning Board and other postsecondary educational institutions and systems should be sought and utilized.

2. The College should assume a leadership role and seek to establish a county postsecondary educational coordinating council in which all institutions and systems engaged in postsecondary education are represented and which will serve a clearing-house and coordinating function for postsecondary education in the County.

3. Consistent with the foregoing recommendation, the College should seek financial support for "brokering" postsecondary educational services such as are provided by the Federal Fund for the Improvement of Postsecondary Education.

Fiscal Support and Resource Acquisition

1. Rather than targeting any one source of fiscal support, the College should develop a sustained and continuing effort to get needed added revenues from all governmental levels (local, state, federal) and from private sources such as corporation and philanthropic foundations; reliance on increased charges to students and others seeking college services should be a last resort to balancing annual budgets.

2. In such a planned course of action, Cumberland County College should seek coalitions with the other county colleges in New Jersey and all of the institutions and educational systems engaged in postsecondary education in Cumberland County.

3. Every effort should be made to acquire the needed approval at local and state levels for the capital expansion and improvements put forth by the College in its 1975-1983 capital requests.

4. In planning for action to acquire support for operating budgets, increases of from 12-15 percent a year should be expected for reasons other than enrollment growth; increases in number of students served will need to be considered in the light of the increases that are already evident in costs per student in the college's operation.

5. College policy governing annual budget requests should require such requests to be checked for consistency with college goals and objectives and major strategic directions enunciated in the current continuing long-range plan statement.

CHAPTER II

CUMBERLAND COUNTY COLLEGE FACES A NEW REALITY

Cumberland County College is a relatively young institution. Established in 1963 under the authority of Title 18A of the Revised Education Law of the State of New Jersey, the College so far has had to react only to pressures on it to grow. Because these pressures were immediate, clearly evident, and continuous, there was no pressing need for the College to engage in extensive long-range planning as a part of the administrative and management practices of the institution. Indeed, there was little time to do so, for with successful accomplishment of Cumberland County's drive to get a college approved and of the college's master plan for developing a campus for its operations, it was caught up in actions essentially related to expansion. They resulted in a record of achievement that must be recognized.

1963-1977: A 15-Year Success Story

In only seven years, by fall 1970, over 2000 persons were enrolled in Cumberland County College programs, generating credits equal to 1164 full-time equivalent students. The College became noted as the first of its kind in the State to acquire and move onto a permanent campus. And its acclaim for producing graduates who did well in later study and in jobs spreads steadily.

By 1968, only five years after its establishment, Cumberland County College sought accreditation by the Middle States Association. It encountered no difficulties in this effort, completing its first college self-study, as required by the Association, in 1969, and receiving full accreditation in 1970.

A Look at the Current Setting

Because Cumberland County College is essentially locally and community based, it must view its circumstances from that base outward to the larger region around the County and to the State of New Jersey. More detail about the County will appear later in the section on local community needs, but a brief overview of the college's general setting in the County, Region, and State is provided here.

Cumberland County

Geographically, Cumberland County is situated on the western side of the southern half of the State of New Jersey. Containing 673 square miles, the County is bordered on the west by the Delaware Bay and on the south by the Delaware River. The neighboring counties are Salem, Cape May, Atlantic and Gloucester.

The major three-city area of the County, Vineland-Millville-Bridgeton, contains 73.5 percent of its residents.[II-1] Recent Labor and Industry data puts the population of the County at 129,085 as of 1975.[II-2] This reflects an increase of 7,711 over the 1970 census data.[II-3] Recent findings by the Economic Development Commission[II-4] support the Cumberland County Planning Board (CCPB) contention that urbanization of the three-city area will continue, and that the growth of this area is such that it will contain more and more of the population of the County in the years to come.[II-5]

In 1970, the racial-ethnic mix of the County was such that 85 percent of the population was considered white and 15 percent non-white.[II-6] Of the non-white population, Blacks constituted the largest portion (92 percent) of the group. A smaller number of Japanese, Indian and others made up the balance of this group. Although more recent census data on the racial-ethnic composition of Cumberland County are not available, data on enrollments in public schools which are presented later in this report show shifts in these characteristics of population in the County to be important. Age groups in Cumberland County find 38 percent under 19, 30 percent between 20 and 44, and 22 percent between 45 and 64, and 10 percent 65 years of age and over.[II-7] More discussion of the significance of these shifts in specific characteristics of the population appears in Chapter V.

Southern New Jersey

Historically, Southern New Jersey has been somewhat isolated from the Northern portion of the State by virtue of geographic factors. With its large area of sandy soil, it was the ideal place for agricultural development. Because of this, agriculture became the mainstay of the economy. Recent events, however, have made it difficult for this to continue on as large a scale as in the past.[II-8] These include high state environmental standards, increasing farm labor costs, and high real estate taxes on farmland. A realization of these factors has caused some agribusinesses to shut down operations in the southern counties and forced those displaced to seek other means of employment.

Recent legislative action by the State has helped the counties of Atlantic and Cape May to overcome this loss of jobs by enactments to enhance the tourist and gambling related businesses to a larger degree.

New Jersey

The State of New Jersey enjoys the advantages of an advanced industrial development and strategic geographic location in the United

States, possessing natural outlets to the Atlantic Ocean and the economic connection that these provide with Europe and other parts of the world. Again, current data on the relative position the State holds in relationship to others in the nation are lacking on some factors, but on the basis of factual information at hand several observations about the State that bear importantly on the main interests of this report are these:

---New Jersey in 1970 ranked 8th among the 50 states in population[II-9]

---New Jersey in 1970 was 3rd among the states in per capita income and in 1975 ranked 5th in this respect with a per capita figure of $6,629[II-9]

---In 1970, New Jersey was slightly above the national average (56 percent) in percentage of 18 and 19 year olds in school (58 percent), right at the average (31 percent) for 20-21 year olds, and a bit below (13 compared to 14.6) for 22-24 year olds.[II-10]

---In 1977-78 New Jersey ranked 49th among the 50 states in state appropriations of tax funds for higher education per $1000 of personal income in the State ($6.29 per $1000 compared to a U.S. average of $11-12).

---In 1977-78 New Jersey ranked 47th in the nation in state tax funds appropriated per capita for higher education ($46. per person compared to a U.S. average of $71.36).

---In percent increase in appropriations of state tax funds for higher education for 1977-78 as compared to 1976-77, however, New Jersey ranked 10th (approximately 26 percent compared to a U.S. average of 20 percent)[II-11]

County Colleges As Community Colleges

Although the designation "county colleges" is used in New Jersey to emphasize, quite properly, the fiscal sponsorship arrangement used in the State to support these colleges, they are clearly established and expected to perform educational services typically attached to public community colleges, and their legally authorized separate, local boards of trustees are so charged. Because this is true, the county colleges in New Jersey should been seen as a part of a larger, nationwide development in education, and for this reason some awareness and understanding of the nature of that larger development needs to be emphasized. To be in character with the other public community colleges of the country, Cumberland County College and the other New Jersey county colleges will need to accept at least to some extent the educational commitment of purpose which community colleges generally hold as well as the broad principles of operation practiced by them.

Commitment to Open Opportunity and Student Accessibility

Put most directly, the mission of public community colleges is to make opportunity for education and training for two years of study beyond the high school graduation level universally available to the citizenry of the community served. To meet this commitment, these institutions typically operate on an "open admissions" enrollment policy, attempt to keep tuition and other costs to students to a minimum, and offer a comprehensive span of programs and services. These usually emphasize programs in five broad areas: (1) those equivalent and parallel to the usual first two years of a bachelor's degree program in universities and preparing students for higher degree-credit study, (2) those preparing for direct employment upon the students' completing the program in the community college, (3) those aimed at community betterment, (4) advanced general education for all students, and (5) extensive personal assessment and counseling services also for all students.

Principles of Operation

Community colleges stress close and prompt responsiveness to the needs of the general citizenry in their service areas. Accordingly, they display a high order of control at the local level, usually, however, within a larger statewide plan or policy framework. Extensive effort is made to draw upon the full range of community resources (libraries, museums, the arts, government, business, and industry, etc.) to enhance the scope and quality of the educational services provided. The converse of this last is also true. Community colleges attempt to make all of the college's resources serve also as resources to benefit the broader community. Thus, campuses are planned to be centers for community activities and faculty and staff are encouraged and expected to be sources of expert information and assistance to community groups and for community action.

These colleges also characteristically attempt to "carry their services to the people." Accordingly, outreach, extension, and off-campus techniques of many sorts are to be found (courses by newspaper, on-site instruction in places of business, radio and TV courses, etc.).

The success and popular need for community colleges is evident in their dramatic growth. Currently, over 4 million students are enrolled in some 1200 such colleges. This means that nearly 40 percent of all American college students are in community colleges and these colleges represent about a third of all recognized postsecondary institutions in the country.

Pressures for Planning

Conditions in which community colleges operate today in New Jersey and in the nation at large, differ considerably from those of the 1960s. No longer are pressures for growth and expansion so strong and evident that all institutions need to do is to react to obvious and intensifying expressions of community need, as was true a decade ago. Neither is there now the clear evidence of willingness and readiness of local and state governments to provide the financial support needed to operate community colleges simply at their request for such support.

In contrast to the circumstances that prevaled during the earlier years following the establishment of Cumberland County College, the climate in which it operates now, and likely will have to operate for the foreseeable future is one of increased accountability of the resources provided and results achieved by the institution. The greater accountability calls for more careful assessment of community needs for programs and services and a sharper planning of the directions it chooses to follow in matching programs and services to local area needs, in managing the implementation of its decisions, and in evaluating their results and effectiveness in concrete, reportable ways.

Pressures on Cumberland County College for a more intensive and extensive planning effort to chart its future show themselves in several ways. Budget requests for both operating and capital funds at both the county and state levels of review are challenged increasingly by questions about what the College intends to do "in the longer run." Reporting requirements whereby the College describes its participation in various programs funded by state and federal funds, such as vocational education, the Comprehensive Employment and Training Act (CETA), and law enforcement, are expected to show specific relationships of college planned action to larger statewide and in some cases federal plans for program development and implementation. Requests for funding put forth by the College as part of proposals of new program thrusts by the College to state and federal agencies and to private auspices are described as incomplete, weak, or unacceptable because they do not appear in a context of an overall institutional developmental design.

In the face of these new conditions, the leadership of Cumberland County College sensed an inadequacy concerning the emphasis given to planning as a part of the college's administrative process. Except for the Master Plan for developing the college's campus, a plan now nearly ten years old, little or no attention has gone to planning as an administrative function. Although planning policies and decisions were made as other administrative functions went on (developing budget requests, establishing personnel policies, etc.), a systematic, forward-looking, and consistently coherent long-range planning activity was not in evidence (See Figure II-1).

An awareness of these new conditions generated action by the college administration and board of trustees to initiate a positive planning activity at Cumberland County College. From that decision emerged the developmental planning efforts and the follow-up recommendations presented in this report.

Action to Begin

Early in 1977, the Cumberland County College administration started an action to establish a structure and process to carry on institutional planning as a more systematic and continuing college administrative function. In this effort the College sought the assistance of the team of educational consultants who author this report and agreed to commit the College to a cooperative effort of some nine months duration, starting in June 1977 and extending to February 1978.

From the beginning of this move toward establishing a long-range planning structure and process at Cumberland County College, a strong emphasis was put on the need to make planning a continuing administrative function at the College. The outcome expected from accomplishment of

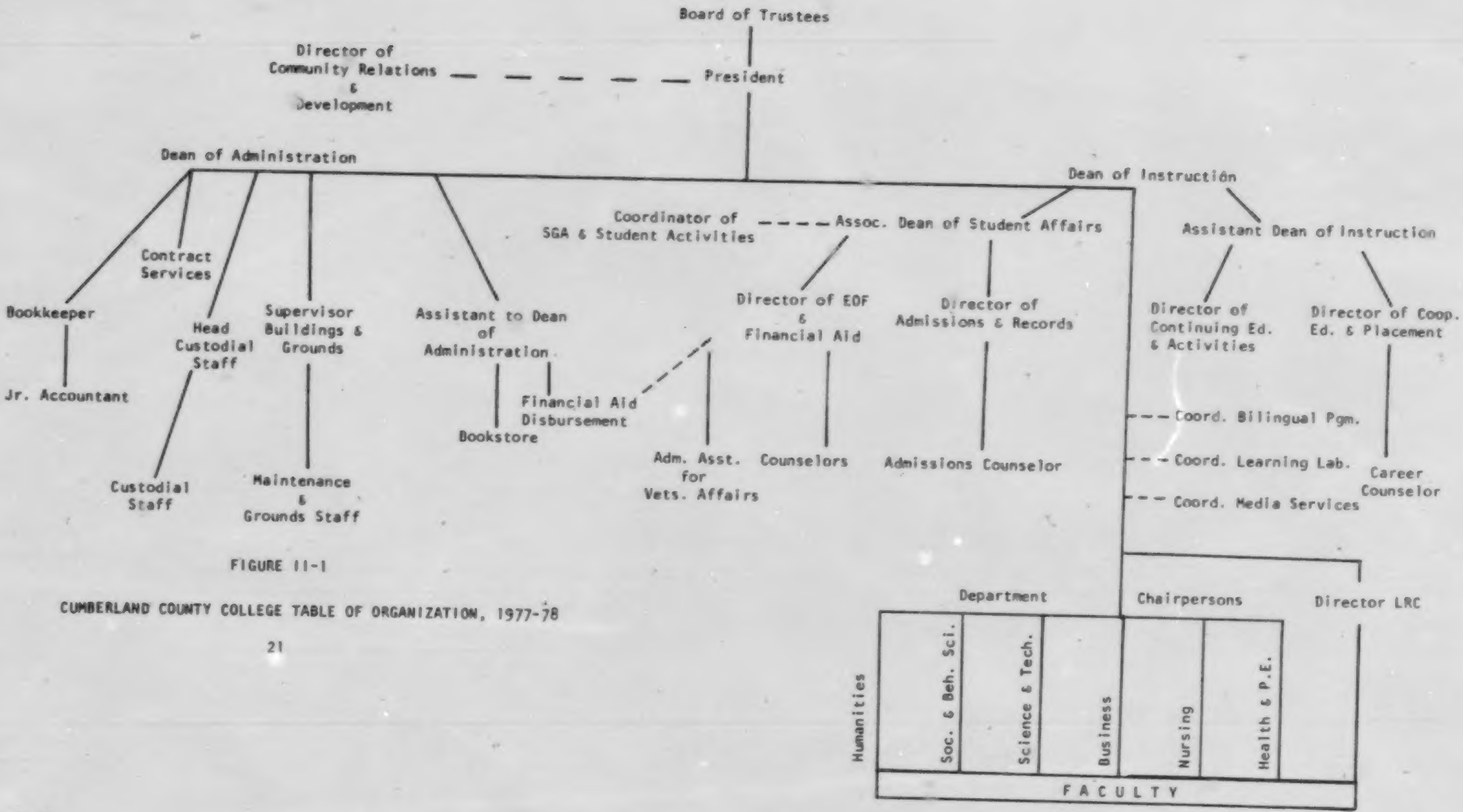

Board of Trustees
President
Director of Community Relations & Development
Dean of Administration
Dean of Instruction
Bookkeeper
Jr. Accountant
Contract Services
Head Custodial Staff
Custodial Staff
Supervisor Buildings & Grounds
Maintenance & Grounds Staff
Assistant to Dean of Administration
Bookstore
Financial Aid Disbursement
Coordinator of SGA & Student Activities
Assoc. Dean of Student Affairs
Director of EOF & Financial Aid
Adm. Asst. for Vets. Affairs
Counselors
Director of Admissions & Records
Admissions Counselor
Assistant Dean of Instruction
Director of Continuing Ed. & Activities
Director of Coop. Ed. & Placement
Career Counselor
Coord. Bilingual Pgm.
Coord. Learning Lab.
Coord. Media Services
Department
Chairpersons
Director LRC
Humanities
Soc. & Beh. Sci.
Science & Tech.
Business
Nursing
Health & P.E.
FACULTY

FIGURE II-1

CUMBERLAND COUNTY COLLEGE TABLE OF ORGANIZATION, 1977-78 the initial action described in this report was to be more than a one-time statement of a long-range plan; rather it was to result in a planning statement based on current and historical facts about the College that would establish a baseline against which planning policies decisions to follow later could be compared and assessed, but even more importantly, an outcome expected is an agreed upon and officially adopted procedure for planning and an institutional adoption of policies necessary to make it work.

Six basic tasks were agreed upon as necessary to accomplish this initial long-range planning effort. They are listed below. Presentations of how each of the last five was attacked and accomplished appear in the last five sections of this report. The first was a part of all of the others.

(1) Search for and review available documents and reports with respect to historical and current facts of relevance to long-range planning at Cumberland County College.

(2) Preliminary identification and refinement of college goals and objectives.

(3) Assessment of needs of the County for postsecondary education programs and services.

(4) Review of current programs and identification of areas of possible new programs.

(5) Assessment of the interests and forces in the community bearing on the College and its future growth.

(6) Projection of fiscal and other resources the College will need.

Some Strengths and Limitations in This Planning Effort

Readers and users of this report are cautioned about some positive and negative aspects of its design and accomplishment. On the plus side are the facts that a baseline for planning is indeed established and that recommendations for establishment of planning on a systematic and continuing basis are before the College, giving it a focus for further action. Also on the plus side are the direct and personal observations of the consultant team and the excellent cooperation and extensive involvement of college staff in the activities of the project.

On the side of a call for use with caution, however, is the fact that, in many cases, the conclusions and related recommendations advanced are based, not on the studies and observations of the consultant team members, but on a close examination of 168 secondary informational sources. This is almost entirely true with respect to the statistical data on demographic and economic characteristics of Cumberland County, the region, and the State of New Jersey. Agencies and officials cooperated fully in providing available data, documents and reports, and the information in them shows consistently the care and skill of the compilers, analysts, and authors of the documents. The shortcomings of much of these data, therefore, are not those of error or poor workmanship but instead are weaknesses of occasional irrelevance of purpose and frequent out-datedness. Most of the available demographic, economic, and related types of studies about Cumberland County, the region, and the State were done for purposes other than postsecondary educational institutional planning. Their usefulness, therefore, to this report was often indirect and ancillary. A number of recommendations directed to overcoming this disadvantage as the planning function goes on at Cumberland County College are advanced later in this report.

CHAPTER III

PLANNING AS A PROCESS

To function effectively every organization and institution needs an organic sense of direction. When it is present the entire organization is positively affected--communications have more meaning, inter-unit activities reinforce and support each other, and morale of personnel is enhanced. When it is lacking, the opposite effects are usually evident--internal communications appear confused, often in conflict, relationships between and among operating units appear tense or in competition, and personnel reflect a lower level of morale.

Planning is important to organizational strength and well being, therefore, because it is done to establish an overall sense of direction, where the institution seeks to head, how it wishes to develop in the foreseeable future, and why. Planning, in the view of the consultant team, must be defined as a process not as an outcome: planning is the process followed by an organization, in this case Cumberland County College, to define goals, to assess circumstances within which it must operate, and to arrive in a systematic and orderly way to policy decisions that will guide its future actions. The outcomes of the planning process, then, are policy decisions, for example, what programs to give highest priority in budgetary support, what types of personnel to seek to join the staff, or what coalitions to form with other institutions or agencies in order to improve the college's accomplishment of its own goals.

Because conditions change both within and outside of the College, planning must be a constant continuing process. Otherwise, operating policies and guidelines will become outmoded and useless or even dangerous to follow. Only when a college recognizes this fact and takes steps to keep its planning procedures vital and effective can it be assured that its policies, general administrative procedures, and overall operations are current and meaningfully tied to the purposes it seeks to accomplish.

Planning Related to Management, Governance, and Leadership Style

The planning function touches critically all of the key functions of institutional leadership, governance, and management, but with respect to each of these concepts, planning has a different relationship that is important to note. Keeping the differences clear will help develop early an understanding of the approach used by the consultant team in cooperation with college staff and officials to develop the planning process at Cumberland and recommendations which are the thrust of this report.

The approach adopted to college planning reflects first of all the approach the key decisionmakers within the institution wish to follow in discharging their role of leadership. A planning process which builds upon and expects a wide base of consultation and participation indicates a leadership that is open in style and committed to participatory policy formulation and decisionmaking. The opposite style of leadership is suggested by a planning process that centers information about the institution and discussion of its significant implications for college operations in only selected points or persons in the organization.

In the development of this planning proposal, the consultant team encouraged and the College supported enthusiastically the notion of planning a participative, widely based activity. Consistent with this posture, a college-wide planning committee was established to work with the consultant team. A list of the members of the planning committee is attached as Appendix A of this report.

Because the outcomes of the planning process are policy decisions that guide the course of institutional development, planning is a critical feature of institutional governance. The governance structure of Cumberland County College relies heavily on the work of committees of faculty and staff. It follows, therefore, that these committees as well as the several organizational units into which the College is divided should have a systematic and regular involvement in the planning process. Thus far in the work exerted toward establishing a planning structure and process at Cumberland, the key college committees and the staffs and administrative heads of the key operating units of the College have been called upon to formulate statements of objectives they believe will relate positively to the college's broad goals. The procedure involved in this is developed more fully in the next major section of this report.

Reference to operating objectives brings out the relationship that institutional planning holds to the management function. College management is smoother and more effective when each of the institution's several sub-parts is clear in understanding the tasks it is expected to perform and outcomes it is expected to produce in order that the broader goals of the total college will be best served. Some colleges have carried the relating of planning, management, and evaluation of sub-parts and the entire institution to an advanced and detailed level--management objectives (MBO). The planning process and outcomes to date as presented in this report do not yet lend themselves to an MBO administrative technique; in the view of the consultant team, however, a substantial groundwork for that technique is now laid, and the decision of whether or not this should be a future path to follow is now open to the College as a future policy decision.

Types of Planning

The administration, faculty, and staff of Cumberland County College should recognize the two major types of planning and should take steps to assure that both are maintained well in its planning structure and procedures. The two types are strategic planning and tactical or operational planning. The former is aimed at establishing the general institutional character of the College, its main goals and major priorities, and broad policy guidelines for moving the College in these directions; strategic planning is long-range, looking ahead at least 5-10 years. Tactical or operational planning, in contrast, is aimed at the more specific institutional moves that keep the institution on the long-range course planned for it but accommodating it to the changing short-term conditions; tactical or operational planning, therefore, is short-range, looking ahead usually over a year or two and often in even shorter time spans.

The Planning Cycle: Steps in Planning

Inasmuch as planning is an essential and continuing function of an effectively operating organization, its recurrent and cyclical nature must be understood as well as the basic elements of concepts that are involved in a successful planning process. Early in the discussion that the consultant team held with the college planning committee, attention centered on the key elements of an effective planning process. These can be stated topically as: (1) clarification of basic assumptions, (2) goal definition and refinement, (3) community needs assessment, (4) examination of current programs against community needs, (5) assessment of resources needed and available, (6) assessment of the complex of forces bearing on college decisions, (7) statement of choices confronting institutional direction and priorities, and (8) decision on choices and translation of decisions to institutional policies and actions.

The conclusions reached from the planning process along with the related statements of policies and projections of institutional actions constitute the college "long-range plan;" in actuality a look 5-10 years into the future. Best practice is to have a formal institutional action to adopt such a plan as an overall operating guideline about every 4-5 years on a regular and periodic cycle. Thus, there should be an in-depth updating of the approved plan quadrennially, or at least every five years. To provide flexibility to the adopted plan, and on the basis of recommendations emanating from the continuing planning process, a procedure for formal amendment of the plan should be a part of the planning policy statements of the College.

Planning Cycle

Given the foregoing approach to planning, a planning cycle much like (but on a longer time cycle) the institutional budget cycle becomes evident. The broad phases of the long-range planning cycle are five:

(1) plan development leading to the periodic, regular formal adoption of a broad guiding plan to last 5-10 years, (2) plan adoption as a formal policy action of the College, (3) plan administration, that is, use of the plan as a basis for operating decisions throughout the College, (4) plan amendment as needed to meet unforeseen and suddenly appearing circumstances within which the College must operate, and (5) plan evaluation, an assessment to judge how well the planning process itself and its outcomes serve the college's purposes.

Basic Assumptions

Early in the discussion of the planning process to be established at Cumberland County College, the consultant team and college planning committee examined a number of assumptions basic to the process at Cumberland. These were:

(1) That Cumberland County College must operate within the parameters set by New Jersey statutes and State Board of Higher Education regulations.

(2) That the College is committed to all of the educational functions usually identified with public comprehensive community colleges.

(3) That Cumberland County is the College's primary service area.

(4) That Southern New Jersey is the College's secondary service area.

(5) That planning is a constant and continuing organizational function of the College.

(6) That effective conduct of the planning process calls for participation of all internal constituents of the College and that, while the direction of the process is a responsibility of the administration, a duty rests on all parties interested in the College and the quality of the services it gives to the community to make the planning process as effective and efficient as possible.

(7) That a planning process and practical utility of a long-range plan require periodic review and an orderly method

of keeping planning decisions up-to-date with changes of conditions both within and outside of the College.

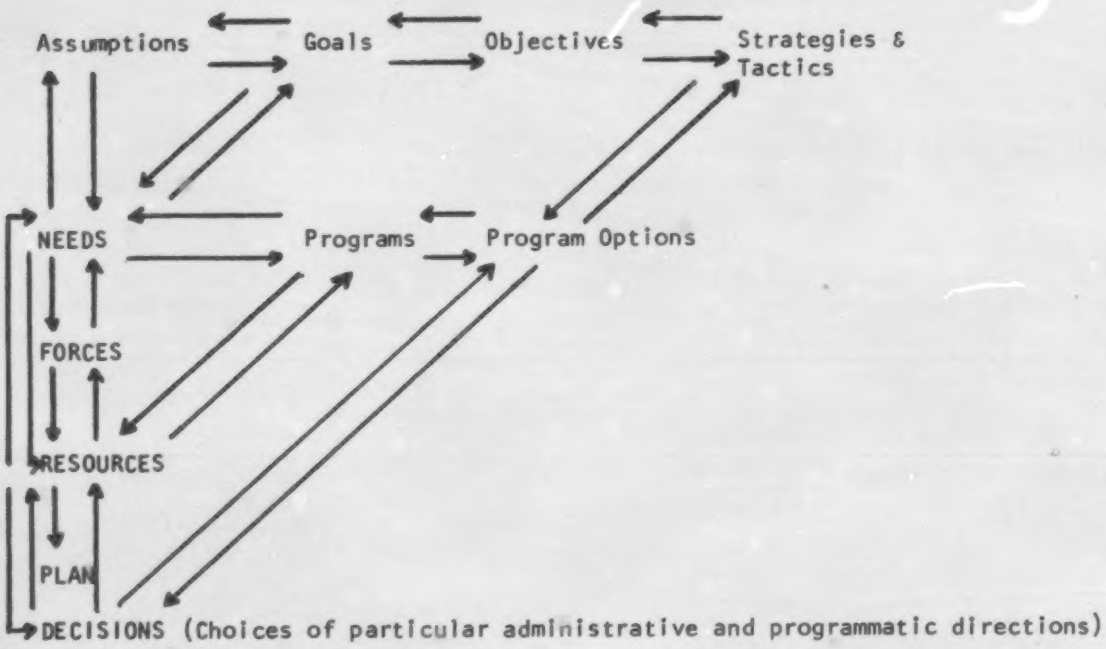
(8) That planning should attempt most specifically for a projection of 3-5 years but should also attempt some broader projections looking ahead an additional 5 years.

Action and Reaction in the Planning Process

The dynamics of discussion, critical analysis, and decisionmaking generated by an effective planning process are illustrated by the diagram in Figure III-1. Several important principles concerning these dynamics should be noted. One is that wide participation by all interested constituencies in the College should be involved, including faculty, staff, administrative officials, trustees, and student representatives. Another is that this participation serves as a guarantee that all relevant issues and related considerations before the College are raised as the planning process proceeds--the dragnet to bring forth all available wisdom to bear on all relevant issues is best when it is a broad one. A third principle is that the range and depth of widespread participation narrows as final, policy decisions for the institution are reached; aided by the broadest and most analytical advice possible, the appropriate governance centers of college faculty, administration, and ultimately the board of trustees must decide the policies to guide the College toward its established goals. A fourth principle to note is that involvement expands again for purposes of getting adoption of the results of the planning process and general acceptance of them by the total college community and, similarly, involvement is again widespread when evaluation of the planning process outcomes is underway.

FIGURE III-1

ACTION AND REACTION IN THE PLANNING PROCESS


Assumptions
Goals
Objectives
Strategies & Tactics
NEEDS
Programs
Program Options
FORCES
RESOURCES
PLAN
DECISIONS (Choices of particular administrative and programmatic directions)

Function of a College Planning Committee

Consistent with the indicated approach to planning, the consultant team considers the presence of an all-college planning committee a key element to successful planning. There are several important functions for this committee to perform. They are:

(1) Maintaining an institution-wide focus on the planning process throughout its several cyclical phases.

(2) Assuring broad participation of college constituents in phases relevant to the interests of each constituent group.

(3) Assisting in the coordination of the process in all phases.

(4) Assuring use in the process of best known techniques in planning.

(5) Assisting in evaluating planning outcomes and assuring a constant normative evaluation as well as regular, summative evaluations.

Planning and Institutional Evaluation

Finally in this section of this report, attention is turned to the way effective planning helps a college to assess its operations. Given agreement about goals, objectives, and use to be made of available resources, operating programmatic and management actions can then be judged by the level to which they are consistent with and move the institution in the direction it seeks to go. Simultaneously, there is continuous appraisal and reappraisal of the plan itself. This evaluation should be both summative [periodic checking and reporting of results achieved against outcomes expected as of a given time] and formative [adjustment of planning decisions to meet new circumstances as indicated in the discussion above of the need for a procedure to amend an adopted plan between time of its formal updating].

CHAPTER IV

GOAL DEFINITION AND REFINEMENT

In order for Cumberland County College to project a course of action for the 80s, it needed to examine again its institutional purposes and ambitions. This chapter describes the procedures followed to do this and reports their results.

Goal Aspiration and Achievement

Goals are broad statements of the institution's purposes or reasons for existence. Goals are ends toward which progress can be measured. They should be consistent with the mission of the institution, achievable, legal, and possible to amend if circumstances change.

The first step toward achieving institution-wide goals occurs when they are translated into objectives for the organizational units, such as departments, divisions, offices and so on. The objectives advanced by each of these operating units constitute the means through which the institution's goals are accomplished. These objectives provide the strategies around which a number of activities can be organized by the operating unit. The objectives should be measurable, have a time line, and include designation of leadership responsibility. The operating unit may need to alter both objectives and activities planned to carry them forward if they prove ineffective in carrying out the institutional goal or purpose intended.

Given the mission of the institution, some goals are thought to be more important than others. That is, the "level of aspiration" for certain goals is higher than it is for others. In like manner, at any point in time some institutional goals are more nearly achieved than others; that is, their "level of achievement" is higher.[IV-1]

The judgment of knowledgeable people about the relative importance of institutional goals provides one basis for operating unit decisions as to priorities and use of available resources. Likewise, for such decisions it is useful to have information about the extent to which its goals have been achieved. Finally, a goal judged to be very important and yet accomplished only minimally should become a focal point for attention by most of the institution's operating units. Thus objectives associated with a goal judged to be very important, but hardly achieved at all, should have higher priority than objectives associated with a goal of equal importance but largely achieved already.

Broad Goals of Cumberland County College

The mission statement for Cumberland County College is provided by the New Jersey State Master Plan for Higher Education.[IV-2]

> The county community college shall act as a local open-door institution and shall be the vehicle for the offering of university parallel transfer and career programs leading to associate degrees, diplomas, and certificates, learning assistance (developmental) programs, and community service programs. In addition, the county community college shall take the lead in developing a smooth articulation with the vocational schools and technical institutes in order that a comprehensive system of career offerings will be developed.

Accordingly, the board of trustees of Cumberland County College has defined as its broad goal that of providing to the county residents "a comprehensive two-year college with a broad spectrum of curricula designed to meet the needs of Cumberland County in general education, in the liberal arts-sciences, as well as technical and semi-professional education."[IV-3]

The broad goals of Cumberland County College are based essentially on the above mission statement proclamation of purpose by its board of trustees. The process of specifying these goals as a part of developing this report included a wide range of county citizens and college personnel. Members of the college planning committee acted in a liaison role, personally delivering goal statement cards to the community or college people assigned to them and returning the completed cards to the president's office. Each goal card carried this statement:

> Assuming that all needed resources (finances, personnel, plant, etc.) are available for Cumberland County College to develop a complete program of services to the County, I believe that during the next five or so years one of the major goals (or broad purposes) of the College should be to ______________________________.

Approximately eighty goal cards were returned. These were grouped by the consultant team into fifteen broad statements of institutional ends or purposes. These fifteen institutional goals are displayed as Appendix B.

As the next step the college planning committee systematically judged both the "level of aspiration" and the "level of achievement" at Cumberland County College for each of the fifteen goal statements. First each committee member was asked to state "how strongly Cumberland County College as you see the total institution will be aspiring or striving to reach each stated goal during the next five years or so in relationship to each of the others listed." Later the same committee members were asked to indicate "the extent to which Cumberland has already accomplished each stated goal in relationship to each of the others listed."

The judgments of the committee were pooled to determine the relative level of aspiration and level of achievement for each of the goals. The goal statements, rank ordered by aspiration level and achievement level, are displayed as Appendix C. The highest level of aspiration is indicated by the rank of "1," and the lowest by a rank of "15;" likewise for the level of achievement.

Reviewing the two rank orders it may be seen that Goal E--to maintain high standards of academic quality--was in top position with respect to both aspiration and achievement. Likewise, but at the other end of the scale, Goal B--to serve as a center for compilation and application of knowledge. . .to assist in research and development--was in bottom position in terms of both aspiration and achievement.

Three sets of goals have been selected for further discussion here: Group I--the five goals which were in the top third in terms of level of aspiration; Group II--goals with a level of aspiration higher than their level of achievement; and Group III--goals with a level of achievement higher than their level of aspiration, a kind of goal overachievement.

Group I. In addition to Goal E--to maintain high standards of academic quality--other top ranking goals in terms of level of aspiration included:

Goal O: To augment (state funding) with federal, foundation, and other private funding;

Goal K: To provide optimum conditions for learning and teaching;

Goal G: To develop a complete response to the postsecondary educational needs of Cumberland County. . .consistent with (programs) typical of public comprehensive community colleges;

Goal C: To meet the continuing needs for post-high school education and training expressed by the adult citizens of Cumberland County (in cooperation with public schools and other public service agencies);

Members of the college planning committee collectively indicated high levels of aspiration for these five institutional goals. For four out of five, however, the goal's level of achievement was judged to be roughly equivalent to its level of aspiration. Only Goal O--to pursue additional funding sources--showed a level of aspiration considerably above the level of achievement for that goal.

Group II. For three additional goals the college planning committee judged the level of aspiration to be higher than the level of achievement:

Goal A: To develop into a cultural center for Cumberland County;

Goal I: To work in close cooperation with the County Vocational-Technical Center, the CETA-Manpower Office and the local school systems;

Goal M: To develop. . .a flexible structure to meet post-secondary educational needs of Cumberland County, including use of new media, off-campus learning centers, cooperative college and community resource utilization, "open learning" systems, etc.

According to the collective judgment of the college planning committee a third group of goals was characterized by a kind of "over-achievement" in that they showed a level of aspiration lower than their level of achievement. This group included:

Goal D: To develop a personnel staff. . .which is outstanding among public community colleges in New Jersey;

Goal H: To strengthen and expand offerings of programs which prepare students for direct entry into jobs;

Goal L: To develop for Cumberland County and Southern New Jersey an interinstitutional cooperative arrangement (with other collegiate and university-level institutions in the State and region);

Goal N: To contribute to an acceptance of a basic value framework by which students and citizens guide their individual lives.

Goals falling into Group I (high aspiration) or Group II (higher aspiration than achievement) constitute important reference points for determining priorities and resource allocation at the operating unit level. They will be discussed further in Chapter VI.

Operating Objectives

The objectives toward which the operating units of Cumberland County College work provide the more specific targets than the broad institutional goals discussed above. Their accomplishment, however, assure that the larger institutional goals are realized. After the institutional goals at Cumberland County College were specified and rated as to levels of aspiration and achievement, attention turned to operating objectives. The heads of major units (departments, divisions, offices and standing committees) were asked to develop the objectives. The units were striving for and how these could serve as means by which the larger institution-wide goals would be accomplished. This process of translating the goals of the institution into the objectives of the operating units is a continuing one.

The same campus committees and unit administrators were also asked to classify their unit's objectives as (a) sustaining, (b) expanding, or (c) improving the college's capacity to accomplish one or more of its broad goals. Within each objective they were next asked to identify activities planned by the unit, and to furnish for these activities the person responsible, the expected completion date, and the procedure for reporting progress. Obviously some objectives can serve the college's larger goals in combination of sustaining, expanding, or improving ways and will require several activities, designed to accomplish together the objective and in turn the institution's related goal. Further information requested about each stated objective included the outcome(s) expected from the associated activities, the time span over which the outcome was to be accomplished, and a plan for periodic evaluation of progress toward the expected outcome. In addition the college committees and operating units were asked to estimate the resources needed to carry out their objectives through the activities currently underway or planned. Finally, the reporting groups were asked to recommend a set of priorities among the several objectives which they planned to carry out in efforts to advance the institution's goals.

In interpreting the results of this planning activity, the consultant team suggests, as a kind of guideline, that in light of the discussion of goals presented above, objectives for goals in Group I or Group II, above, presumably would have higher priority throughout the institution than would objectives for goals falling in Group III. Likewise, objectives related to goals in Groups I or II presumably would be favored in the expected competition for scarce resources at the College.

As this final report was being written the lists of objectives from the several operating units were still coming in.

The relationship seen by the administrative offices, academic units, and college-wide committees which replied to the Fall 1977 call for statements of objectives in relationship to broad college goals is shown in Table IV-1. On the average, six broad goals were addressed by the statements of objectives. The goals most heavily addressed were K-to provide optimum conditions for learning and teaching,

TABLE IV-1

Broad College Goals Cited in Unit and Committee Statements of Objectives

Code # of Unit or Committee	BROAD GOALS*															Total # of Goals Cited
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1			X		X	X									X	4
2					X			X		X						3
3					X	X	X	X	X		X				X	7
4			X		X	X	X	X	X	X	X	X	X			10
5	X			X	X	X	X				X			X		7
6				X		X					X				X	4
7	X		X		X	X	X	X		X	X		X	X		10
8			X		X	X		X			X			X		6
9			X			X					X					3
10							X				X					2
11					X						X					2
12													X	X		2
13	X	X	X	X	X	X	X	X	X		X	X	X	X		13
14**																
15**																

*As Listed in Appendix B and without differentiation by relationship of objective as "Sustaining, Expanding or Improving" college achievement of goal.
**Did not indicate relationship to goals sharply enough to classify.

E-to maintain high standards of academic excellence, and F-to develop and maintain procedures for institutional self-appraisal and renewal. Cited at the average level were C-to cooperate in an effort toward full service to adult learners, G-to develop full comprehensiveness as a community college, and H-to strengthen offerings to prepare students for direct entry into jobs. Least recognized of the broad goals were B-to serve as a center for compilation and application of knowledge to serve the locality and L-to develop as a learning center and clearinghouse for postsecondary services. The wide range of position reflected in these relationships and their congruence with the position expressed by local leaders in the community as reported later in Chapter VII, in the view of the consultant team, have high significance to the long-range success of the planning process and of the College. A need for continued examination of these relationships and dialogue within the faculty and staff of the College are clearly indicated.

The variation of coverage of the planning elements requested is shown in Table IV-2. While this is a useful start, the objectives statements show that much more work on this part of the planning process remains necessary. The college planning committee, or some other monitoring group, will need to review each operating unit's objectives according to the criteria noted above. In their present form the statements vary too widely in detail and style of presentation to serve fully usefully as planning indicators. In summary, for each objective more precise relating of committee and unit objectives will be needed with respect to:

---the goal to which it relates

TABLE IV-2

Coverage of Planning Elements in College Committee and Operating Unit Statements of Objectives

PLANNING ELEMENT	Committee or Operating Unit Code #														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Relating to goals	X		X	X	X	X	X	X	X	X	X	X	X		
2. Indications as Sustaining, Expanding, or Improving			X	X	X					X	X				
3. Outcome(s) expected	X	X	X	X				X							
4. Time span needed		X	X	X						X					
5. Evaluation Techniques													X		
6. Activity cited to complete:	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
a. completion date															
b. reporting procedure												X		X	X
c. person responsible															
d. resources needed		X	X	X				X	X			X	X		X
7. Priority status		X						X	X			X	X		

---its classification as a sustaining, expanding or improving effort toward goal achievement

---outcome(s) expected

---time span over which outcome is to be accomplished

---plan for periodic evaluation, including reporting procedures

---activities planned by the unit to carry out the objective

    ---expected completion date for the activity

    ---reporting procedure for the activity

    ---person responsible for the activity

    ---resources needed for the activity

---priority status of the objective

A continual monitoring of the extent to which the unit's operating objectives are contributing to the accomplishment of the institution's goals is central to the plan for periodic evaluation. If this contribution is not forthcoming, activities planned for implementing the objective should be reviewed and possibly changed. Even the objective itself may be replaced with a strategy which will be more effective in accomplishing the institutional goals.

To assist in this work of more sharply relating college committee and unit objectives to large college goals and to making the entire attention to institutional goals and objectives focus more fully on planning for the 80s, the consultant team and college staff plan an intensive two-day workshop to occur at the College on February 2-3, 1978.

CHAPTER V

CUMBERLAND COUNTY COMMUNITY NEEDS FOR A COMMUNITY COLLEGE

A fundamental cornerstone of any successful community college is its commitment to address the indigenous needs of the community it serves. It is not surprising, therefore, that one of the fifteen broad goals for Cumberland County College specifically addresses this fundamental. Goal J states "To establish and maintain a continuing 'market analysis' approach to determining what new accommodations Cumberland County College should make to meet effectively the needs of the county's citizens and general economy for postsecondary educational programs and services." This chapter is concerned with such an approach.

In accord with the agreement reached by the College and the consultant team, most of the work in developing the college's plan for the 80s related to community needs assessment drew upon existing available resources. Such an agreement was necessitated by both time and financial limitations; however, two specific information solicitations were carried out in order to enhance the reliability of information drawn from other studies or reports.

This chapter has been organized to achieve two purposes. One would be to draw from potential college enrollment projections and establish the basis for program development as reported in Chapter VI. The second purpose is to provide the College with an explanation of the nature and scope of community needs assessment with related data analysis together with an explanation of community needs assessment approaches and strategies which may enable Cumberland County College to initiate a systematic and on-going "market analysis" approach.

Four broad areas related to community needs assessment and consistent with the broad institutional goals as noted provide the organizational framework for this chapter and for the suggested market analysis approach. They are: (1) demographic factors. . . Goal B; (2) employment/manpower and economic needs. . .Goals C and I; (3) citizen needs and aspirations. . .Goals L and M; (4) other external/internal determinants. . .Goals A and L.

Demographic Factors

A great value to the College in understanding its service area is data developed by the U.S. Census every ten years. The consultant team suggests Cumberland County College begin anticipating the U.S. Census data collection process scheduled to begin in a few years. At that time, the College should make every effort to incorporate some of its information needs into the census taking procedures in Cumberland County. It should also seek retrieval of the census information locally in order to avoid the delay involved before the information is released at the national level. In addition, the College, together with appropriate county planning agencies, needs to develop a procedure for up-dating U.S. Census information during the decade. The consultant team has analyzed the information available, acknowledging the vulnerability of the existing data base to error because of the time which has passed since the last U.S. Census was completed.

Population Growth and Shifts

An understanding of the population is essential for proper planning. Population growth and shifts of such variables as size, racial/cultural mix, age groups, geographic dispersion, and sex are all important in order to grasp a better understanding of the constituency which the institution should strive to serve. Indications of growth, decline, or shifts in any important characteristic (geographic concentration, age, racial composition, labor force make-up, etc.) has strong implications for the years ahead.

Population Size

Since 1920 the County has shown an increase in population every census year (See Table V-1). At the last actual census (1970) Cumberland County had a total population of 121,374, reflecting a 13.6 percent increase over 1960. This rate of increase almost exactly matched that of the nation but lagged behind that of New Jersey which grew 18.2 percent in the decade. That the County, however, may increase more rapidly than the State during the 1970-80 decade is suggested by the relative rates of 6.3 and 2.5 percent increase indicated by the New Jersey Department of Labor & Industry and Sales and Marketing Management projections for 1980; by then the Department expects 138,000 people in the County.

Racial Mix

In 1960, the Black population of the County was 12.2 percent. The total non-white population of 14,026 accounted for 13.1 percent. In 1970, the Black population was 13.6 percent. The total non-white population of 18,026 accounted for 14.9 percent. The 1970 census information indicates 5.5 percent of the county population is

TABLE V-1

Population Changes: U.S., New Jersey, Cumberland County, 1920-75

	United States		New Jersey		Cumberland	
Year	Population	Percent Increase	Population	Percent Increase	Population	Percent Increase
1920	105,710,620	14.9	3,155,900	24.4	61,348	11.2
1930	122,775,046	16.1	4,041,334	28.1	69,895	13.9
1940	131,669,275	7.2	4,160,165	2.9	73,184	4.7
1950	150,697,361	14.5	4,835,329	16.2	88,597	21.0
1960	178,464,236	18.4	6,066,793	25.5	106,850	20.6
1970	204,816,296	13.3	7,168,164	18.2	121,374	13.6
1975			**7,344,800	2.5	*129,085	6.3

Source:

*New Jersey Labor & Industry "Official State Estimates"
**Sales & Marketing Management for 1976

Spanish-speaking, and 4.5 percent are of Puerto Rican heritage.

Clearly the Blacks and Spanish speaking/Puerto Rican minorities constitute the greatest portion of the non-white population of Cumberland County. Other sub-groups of the population appearing in significant numbers, as a combination of native and foreign born, include those of Italian and German descent, with the former category numbering over 8,000.[V-1]

Age Groups

Taking a look at four major age-groupings as reported in the 1960 and 1970 census figures (See Table V-2), we find that the 20-44 group experienced a drop and the 45-64 group experienced only a slight increase as the percentage of the total county population in 1970 over 1960. This change is more dramatic if we consider the total population in ten-year groupings from 1960 to 1970.

From Table V-3 it can be seen that persons in the 30-39 and 40-49 age groupings have decreased as far as their make-up of the total population of the County is concerned. This explains the drop indicated in Table 2 in a more specific manner. Implications for the College are to be noted, in that these groups will constitute a dwindling percentage and that programs aimed at them will have to be particularly relevant.

Other agencies which have an interest in the population of Cumberland County[V-2] estimated the 1974 and 1976 population and found 128,700 as the population for 1974 and 134,000 for 1976. Although these do not coincide with the Labor & Industry Official Estimates, they are worth investigating because they do indicate different viewpoints. As far as age groupings are concerned, they estimate the following information seen in Table V-4.

TABLE V-2

Major Age Groups and Percent of Total

Age Group	1960 Number	1960 Percent	1970 Number	1970 Percent
19 & under	38,940	36.5	46,277	38.1
20-44	35,088	32.8	36,799	30.3
45-64	22,450	21.0	26,163	21.6
65 & over	10,372	9.7	12,135	10.0

Source: CCPB Population 1970, p. 13

TABLE V-3

*Age Groups as a Percentage of Total Cumberland County Population, 1960,1970

Age Group	1960		1970	
	N	% of Total	N	% of Total
<10	21,605	20.2	23,445	19.3
10-19	17,335	16.2	22,536	18.6
20-29	12,290	11.5	16,494	13.6
30-39	15,312	14.3	13,233	10.9
40-49	14,464	13.5	14,908	12.3
50-59	11,095	10.4	13,463	11.1
60<	14,749	13.9	17,295	14.2
TOTALS	106,850	100.0	121,374	100.0

*Source: 1960 and 1970 Census of the Population

TABLE V-4

Age Groups as a Percentage of Total
Cumberland County Population, 1974, 1976

Age Groups	*1974 % of Total		Number	**1976 % of Total		Number
0-5	10.7	33.2	42,728		31.6	42,344
6-11	11.0					
12-17	11.5					
18-24	11.9		15,315	11.3		15,142
25-34	12.5		16,088	14.2		19,028
35-49	16.4		21,107	16.1		21,574
50-64	15.7	26.0	33,462		26.8	35,912
65+ over	10.3					
TOTALS	100.0		128,700	100.0		134,000

Source: *Sales & Marketing Management 7-21-75
**Sales & Marketing Management 7-25-77

Of interest in Table V-4 is that the 0 to 17 year old group drop slightly, although it cannot be determined which sub-element group within this sub-group accounts for this drop; and the 18 to 24 year olds, the traditional college-age youth, drop very slightly. On the other hand, the 25 to 34 year old group shows an increase, pointing to increased program development for the person who will "change careers" at about that age range.

Geographic Dispersion

Census data for 1960 and 1970 indicated a drop of population for some municipalities of the County. Those with the most drastic reductions being Lawrence--11.7 percent; Greenwich--11.3 percent and Downe--5 percent. It was expected by the New Jersey Department of Labor & Industry, however, that most declines evident from 1960 to 1970 would correct themselves, and most municipalities would be at or above 1960 levels, for 1976. The actual and estimated populations of the several municipalities in the County are presented in Table V-5.

For the 1960 to 1970 period, Vineland and Millville experienced an increase in population, while Bridgeton had a slight drop. The Three-City area accounted for 73 percent of the county population of 1960 and 1970. On the basis of Labor & Industry figures for 1976, the Vineland-Millville-Bridgeton area will contain 74 percent of the total county population. By including other urbanized areas of the County immediately surrounding the Vineland-Millville-Bridgeton area, it can be seen more than 84 percent of the population was clustered around these areas in 1960 with about the same for 1970.[V-3] The 1976 figures in Table V-5 show that the trend toward urbanization in the County is continuing.

TABLE V-5

Population by Municipality for Selected Years

MUNICIPALITY	*1960	*1970	**1976
Bridgeton	20,966	20,435	21,465
Millville	19,096	21,366	22,910
Vineland	37,685	47,399	51,140
Commercial Twp.	3,244	3,667	3,890
Deerfield Twp.	2,053	2,464	2,710
(Downe Twp.	1,870	1,777	1,805
Lawrence Twp.	2,639	2,329	2,450
Fairfield Twp.	3,916	4,990	5,404
(Greenwich Twp.	1,086	963	960
Stowcreek Twp.	1,010	1,050	1,140
(Hopewell Twp.	3,586	3,970	4,170
Shiloh Borough	554	573	595
Maurice River Twp.	3,105	3,743	4,295
Upper Deerfield	6,040	6,648	6,860
TOTAL	106,850	121,374	129,795

*CCPB Population 1970, p. 10
**New Jersey Labor & Industry "Official State Estimates"

(Indicates Census Tracts

Maps drawn by the Cumberland County Planning Board and reproduced here as Figure V-1 and Figure V-2 show population dispersal and density by geographic sectors of the County.

Comparing Figure V-2 with Table 5, we can see that the bulk of the county population resided in the Vineland-Millville-Bridgeton area and Deerfield, Hopewell, and Upper Deerfield areas. This information led the Cumberland County Planning Board to expect that the Vineland-Millville-Bridgeton area to grow by more than 25 percent per decade.[V-4] If New Jersey Labor & Industry figures are accurate, this area has experienced a 7 percent growth from 1970 to 1976. Although this is not as high as the Board expected, it still accounts for more than half the growth of the County from 1960 to 1970 when a 13.6 percent increase occurred.[V-5]

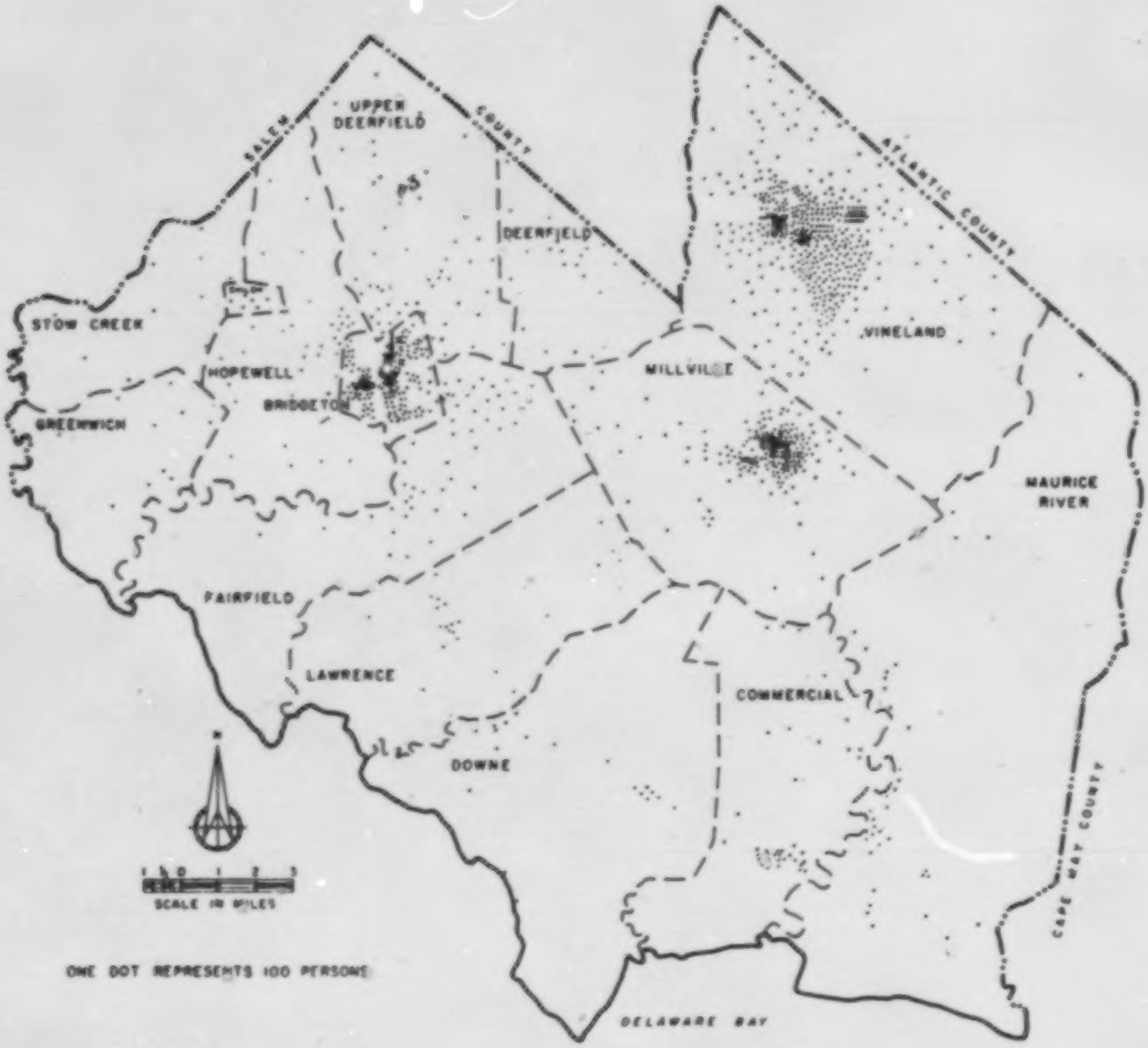
On the basis of these analyses, a continuing but not dramatic increase in population of Cumberland County can be anticipated, with the population distribution staying about the same point to the Vineland-Millville-Bridgeton area as that which will contain the bulk of the county population for the years ahead.

Employment/Manpower and Economic Needs

As part of the market analysis approach suggested by the consultant team, a closer working relationship is proposed between the College and the Cumberland County Planning Board. This Board has carried out several important studies related to the employment and economic needs for development of the County. It is this body which frequently works with prospective industries or businesses considering locating in the County. The College is an important resource which the Planning Board can offer prospective employers concerned with the manpower

FIGURE V-1

POPULATION DISTRIBUTION
CUMBERLAND COUNTY, N. J.
1970 U. S. CENSUS

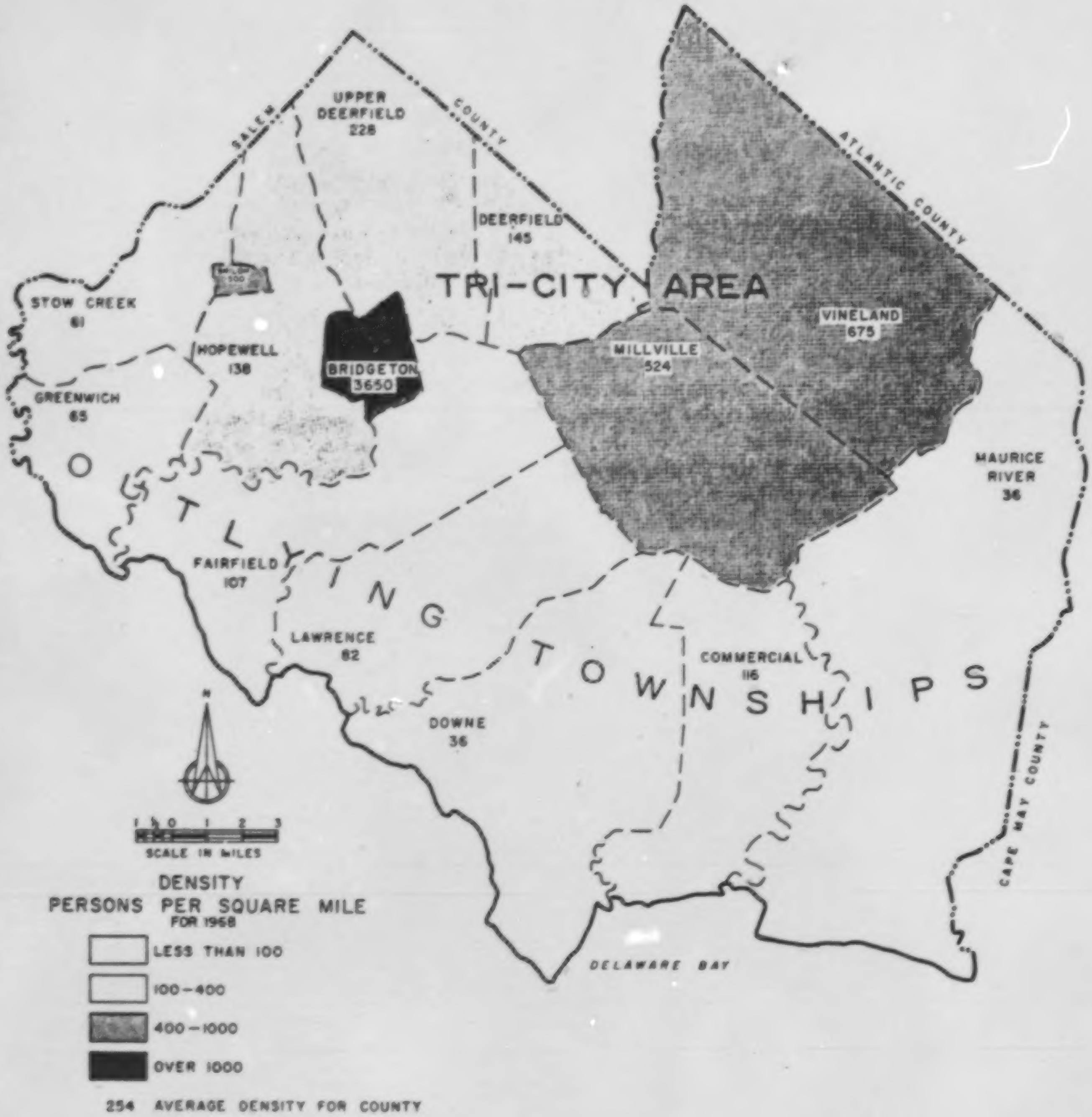

UPPER DEERFIELD
SALEM
COUNTY
DEERFIELD
ATLANTIC COUNTY
STOW CREEK
HOPEWELL
BRIDGETON
GREENWICH
MILLVILLE
VINELAND
MAURICE RIVER
FAIRFIELD
LAWRENCE
DOWNE
COMMERCIAL
CAPE MAY COUNTY
DELAWARE BAY
N
0 1 2 3
SCALE IN MILES
ONE DOT REPRESENTS 100 PERSONS

PREPARED BY THE CUMBERLAND COUNTY PLANNING BOARD

Kotlikoff and Kotlikoff, p. 13.

FIGURE V-2

GEOGRAPHIC SECTORS OF CUMBERLAND COUNTY, N.J.


SALEM COUNTY
UPPER DEERFIELD 228
DEERFIELD 145
ATLANTIC COUNTY
TRI-CITY AREA
SHILOH 100
STOW CREEK 61
HOPEWELL 138
BRIDGETON 3650
MILLVILLE 524
VINELAND 675
GREENWICH 65
MAURICE RIVER 36
OUTLYING TOWNSHIPS
FAIRFIELD 107
LAWRENCE 82
COMMERCIAL 116
DOWNE 36
CAPE MAY COUNTY
DELAWARE BAY
N
1 ½ 0 1 2 3
SCALE IN MILES
DENSITY
PERSONS PER SQUARE MILE
FOR 1968
LESS THAN 100
100-400
400-1000
OVER 1000
254 AVERAGE DENSITY FOR COUNTY

PREPARED BY THE CUMBERLAND COUNTY PLANNING BOARD

SOURCE: CCPB URBANIZATION, p. 2.

training potential of a prospective area. At the same time, the College can benefit by soliciting cooperation of the Board whenever it carries out surveys whereby desired information can be gathered simultaneously and at no additional cost to either agency.

Characteristics of the Economy and Shifts

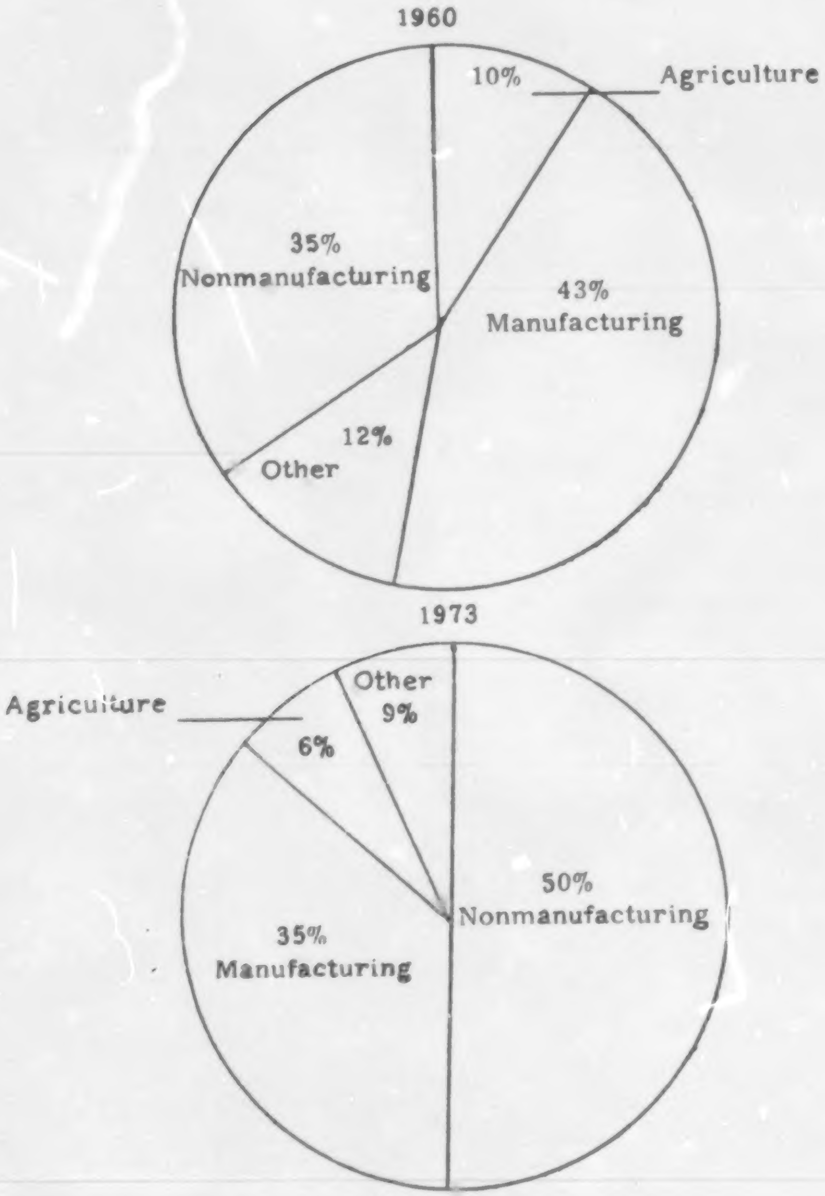
This section will be concerned with the trends in the areas of Labor Force Analysis, Income, Taxable Wealth, and Market factors. A look at 1960 will begin each sub-section, with a contrasting view of 1970 and at the present time.

Labor Force Analysis: During the past two and half decades, the labor force in Cumberland County experienced some important changes. 1960 saw the total labor force of Cumberland County at 44,503. Of this number, 38,343 were employed in nonagricultural, and 3,116 were employed in agriculturally related industries. The total employed, then, was 41,459 resulting in a 6.8 percent unemployment rate. Of those employed, over 45 percent were engaged in manufacturing.[V-6]

1970 brought the County an additional 5,342 workers bringing the total labor force to 49,845. Of this total 46,942 were employed, with an unemployment rate of 5.8 percent.[V-7] At that time, as noted by Kotlikoff and Kotlikoff, in their study for the Cumberland County Economic Development Commission in 1973 of noted changes from 1960 to 1973 in the percentage of the labor force engaged in various types of work, manufacturing employed 35 percent of the labor force.[V-8] In 1973 there was still 35 percent employed in this sector. Although differing slightly from the data compiled by the Planning Board for 1960, the 1973 study indicated a distinct increase in the percentage of the labor force engaged in non-manufacturing, and a corresponding drop in all other sectors. (See Figure V-3).

FIGURE V-3

EMPLOYMENT BY SECTOR



Source: New Jersey Department of Labor & Industry
Kotlikoff and Kotlikoff, p. 54.

Looking at the percentage of workers employed in various sectors in terms of sex and race, one sees a distinct disparity in job participation. 1970 census data indicates that of those in the labor force 61 percent were males and 39 percent were females. Also Black and Puerto Rican workers constitute 11.1 percent and 3 percent of the labor force, respectively.[V-9] As evidenced in Table V-6, Blacks, who account for 13.6 percent of the population of Cumberland County show percentages larger than their representative percentage among workers classified as operatives, laborers, service, and household workers. Looking at the same figures another way[V-10] the Board indicates that of the Blacks who are employed, 43.3 percent are operatives with the lowest category being employed as household workers.

Per Capita Income: Census data for 1970 found the per capita income for Cumberland County at $2,902 compared to $3,691 for the State of New Jersey.[V-11] The Economic Development Commission updated the census information to 1973 and determined that the per capita income was then $3,673 for the Vineland-Millville-Bridgeton area as compared to $2,987 for 1970.[V-12]

The Cumberland County Planning Board reported that the 1970 median income for families was $9,529 and the mean was $10,407.[V-13] The census data also indicated that the County had the low record of only 16.6 percent of the families earning over $15,000 as compared to 29.5 percent for the State.

Because of the changing economy and rapid inflation, the use of per capita income and median and mean figures may be misleading. Taking into consideration these, and other factors, Sales & Marketing Management has an indicator known as Effective Buying Index (EBI). This is the

TABLE V-6

Comparison of Participation in Employment Sectors By White and Black Workers-1970

CATEGORY	TOTAL	% WHITE	N	% BLACK	N
Prof/Managerial	7,993	96.5	7,710	3.5	283
Clerical/Sales	9,284	95.2	8,840	4.8	444
Crafts/Foreman	7,505	93.1	6,985	6.9	520
Operatives	13,956	83.9	11,706	16.1	2,250
Labor	3,475	76.9	2,671	23.1	804
Service	4,341	85.3	3,701	14.7	640
Household	388	34.1	132	65.9	256
TOTAL	46,942	88.9	41,745	11.1	5,197

Source: CCPB *Population 1970*, p. 18.

amount of money that a household has to spend on luxury and necessary items. This is indicative as to the amount of expendable income there is in any given area.

For 1974, the number of households in the County was estimated to be 42,300. Of these 30.6 percent had an EBI rating of below $7,999, 9.5 percent between $8,000-$9,000, 24.3 percent between $10,000-$14,999, and 35.6 percent over $15,000.[V-14] Comparing these figures to 1976, we find 44,300 households with the following EBI ratings: 25.9 percent below $7,000; 8.1 percent at $8,000-$9,999; 20.7 percent at $10,000-$14,999; and 45.3 percent above $15,000.[V-15]

The comparison of the two years clearly indicate increased income by some, but if compared to the New Jersey figures for 1976, the County is behind in the percentage of those in the $15,000 or more category, and well ahead of those below $7,999. (See Table V-7).

Taxable Wealth: The net valuation of taxable property in Cumberland County for 1976 was $951,439,165. The average percentage of taxes for school purposes is 48.6 percent. The school districts that are below this figure are Bridgeton, Lawrence, Millville, and Vineland.[V-16] The tax burden for the support of the schools is higher in the smaller, less populated municipalities. Because an increase for the support of the County College would increase this percentage even more, the College needs to be sure that its programs and services are effective in reaching out to all parts of the County and the value of these to the entire County needs also to be demonstrated and communicated to all.

Views and Needs of Employers

As a part of this planning project, chief personnel officials of the fifteen largest employers in Cumberland County were interviewed

TABLE V-7

*EBI Rating Comparison for Cumberland County for 1974 and 1976 with 1976 compared to New Jersey Households

LEVEL	% 1974 County	% 1976 County	% 1976 New Jersey
.0-7,999	30.6	25.9	19.8
8,000- 9,999	9.5	8.1	5.9
10,000-14,999	24.3	20.7	17.6
15,000 + over	35.9	45.3	56.7

*Effective Buying Index. Source: Sales & Marketing Management 7-21-75 and 7-25-77.

personally by members of the college staff, following an interview guide developed by the consultant team. On the basis of the written reports of the interviews several findings of interest to the college's long-range planning can be identified.

Although general agreement emerged that the College was serving the population of the County well in terms of geographic coverage, a significant fraction of the respondents indicated a more complete coverage was desired. The wish was for a greater dispersal of opportunity for study in various locations in the County.

Among fields of study having more jobs than applicants mentioned were X-ray technology, machinists, construction, data processing, and systems analysts. Among those having fewer jobs than applicants were administrative, secretarial, lawyers, and teachers.

A majority of respondents indicated that the cultural interests of the people of Cumberland County were not being sufficiently served. Overwhelmingly, the view expressed was that the varying ethnic interests were also not now well served, and this proved true also with reference to the different racial interests in the community.

Among the broad issues and problems in the community to which postsecondary educational programs and services could better direct themselves were: the special problems of the Black and Spanish-speaking populations, the lack of diverse and accessible cultural activities, limited public transportation, and untapped historical surroundings. Suggestions advanced for consideration by the College in its planning efforts included outreach programs to expose young children to college opportunities, more cultural events, strengthened health education, management training in industry (on-site), and extended effort to provide a focus and center for community development.

On August 18, 1977, the College, at the request of the consulting team, initiated a letter of inquiry to all members of all advisory committees of the College, and to key officials of human service agencies that serve the college's areas. Some 250 letters were sent; the questions posed in the letter parallelled those used in the interviews of employers.

From the responses received to this inquiry, many areas of work go unmet by the College. Areas with the greatest needs appear to be mental health, licensed practical nursing, clerk typist and stenographic work, and basic communications. No similar need was reflected in such categories as agriculture and social workers. Of interest is the apparent difference in view as to needs for secretarial workers by the local employers as reported above and that need as seen by the larger and more dispersed group of advisors and human resource agency officials.

Areas of indicated needs that coincide with areas of career choice by the Boy Scout Survey of Youth Career Interests which will be discussed later in this chapter can also be highlighted. Due to overlap, some career areas were arbitrarily included due to similarity of purpose. It should be noted, that, although the College does provide services to meet to some extent some of the needs highlighted, the need is not being adequately met. For example, there is an indicated need for good typists and stenographers, as well as medical secretaries. The College provides programs in these areas (clerk/steno) in its Secretarial Science certificate program, but evidently is falling short of providing graduates to hold positions successfully as medical secretaries. What is probably happening is that the more competent graduates of this program are being hired as medical secretaries, and the less able as regular clerk typists/

stenographers. This may be good for initial placement of graduates, but results in a less than adequate supply of both medical secretaries and typists/stenographers over a period of time.

Where no anticipated job opportunities exist as in the agriculture and social workers areas, and in comparing these reports to results of the Boy Scout Youth Survey where career choices were made, it can be seen that a disparity exists in the fields of Social Work and Accounting; the field reports an oversupply of workers but students show high interest. Also, a case could possibly be made against the college's programs in small business operation if graduates would have to work as manager trainees instead of operating their own shop. Finally, it should also be noted that the fields of government and public service are reported in conflicting ways by different respondents. Some indicated more workers as being needed and others claiming these were areas where more personnel were not needed.

Citizen Needs and Aspirations

Cumberland County College needs to examine potential strategies for on-going determination of citizen needs and aspirations which would enable the College to accommodate through its programs and services. The consultant team is quite aware of the considerable cost involved in carrying out any large scale surveys of citizen needs and aspirations through such techniques as mail campaigns, interview sampling, or solicitation through trained telephone interviewers. An alternative is for the College to identify a sequence of field studies related to course work carried on as part of the regular academic program and for which dedicated faculty could provide an educational experience to students while gaining true-life experiences for students involved.

Assistance can be provided cooperating faculty in the design and statistical analyses aspects of such studies. Through this means, the College could develop a schedule of studies which would examine such important information as attendance patterns of students enrolled according to zip code residence area; follow-up studies of graduates or non-graduates of the College; sampling of citizen awareness of the College and its programs; needs or aspirations of target groups within the county population and so forth. Such an approach would require coordination and a planned design if it were to be meaningful in the college's planning process; nevertheless, the consultant team believes the climate at Cumberland County College is most promising for such an approach.

Trends in Public School Enrollments

At the request of the consultant team and with cooperation of the Cumberland County superintendent of schools, statistics were compiled on grade enrollments in the several public school systems of the County. Separate compilations for two years, 1976 and 1977, are available. The total public school enrollments in 1976 and 1977, respectively, are 28,149 and 28,860; in 1970 the total was 30,178. The figures in Table V-8 show some selected relationships drawn from the compilation for 1977. In its long-range planning, Cumberland County College needs to note three findings in the relationships shown in the table: (1) Bridgeton shows an increase of from 14.3 to 18.1 percent when looked at in terms of the proportion of 10-12 compared to K-3 grade pupils (more of the younger children are in Bridgeton); (2) the total numbers of students enrolled in public school is generally downward--the number of students in grades 4-6 is only 78.2 percent of those

TABLE V-8

Number and Percentages of 25,590 Pupils in Cumberland County Public Schools, September 1977, By Grade Groups, Location & Race

	LOCATION					RACE				
GRADES	Mill.	Vine.	Brid.	All Other	Tot.	White	Black	His-panic	Other	Total
k-3-#	1416	2829	1360	1915	7520	4682	1611	1168	59	7520
%	18.8	37.6	18.1	25.5	100.0	62.3	21.4	15.5	.8	100.0
4-6-#	1013	1625	900	1440	4978	3307	994	628	49	4978
%	20.3	32.7	18.1	28.9	100.0	66.4	19.9	12.6	1.1	100.0
7-9-#	1598	2552	1052	1159	6361	4501	1172	660	28	6361
%	25.1	40.2	16.5	18.2	100.0	70.8	18.4	10.4	.4	100.0
12-12-#	1694	2373	963	1701	6731	4834	1301	546	50	6731
%	25.1	35.3	14.3	25.3	100.0	71.8	19.3	8.1	.8	100.0
TOTAL #	5721	9379	4275	6215	25,590	17,324	5078	3002	186	25,590
%	22.4	36.7	16.7	24.2	100.0	67.8	19.8	11.7	.7	100.0

*Does not include 2,270 students for Fairfield and Shiloh districts for which grade group data were not available.

in grades 7-9 and 74.0 percent of those in grades 10-12 (the inclusion of kindergarten with grades 1-3 in the table precludes carrying this trend the next step downward); and (3) while the overall trend in public school enrollments is down as they are examined from the higher to the lower grades, this is not true of students who are Black or Hispanic; Blacks account for 19.3 percent of grades 10-12 pupils but 21.4 percent of K-3, and the respective percentages for Hispanic pupils are 8.1 and 15.5 percent.

Profile of Cumberland County College Students

Persons attracted to the College reflect most directly the needs for postsecondary education to which its current programs and services respond. In the fall of 1977, the College enrolled 1060 full-time students and another 882 persons on a part-time basis; the full-time equivalent student enrollment is 1369.

Because more detailed breakdown is available of the students enrolled in the academic year 1976, a profile of Cumberland County students can be better described on the basis of that year. This is done in Table V-9. The data show among other findings, that the three-city area accounts for some 70 percent of the full-time enrollment and about 65 percent of the part-time enrollment. This raises some question about the geographic outreach of the College to the more home and work bound part-time students.*

Of interest to this report is the extent to which the College serves persons interested in advanced education. From Cumberland County

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*In light of statements made earlier about the college's reach to minority groups, data available as this report was being put into final form are especially meaningful. In fall of 1977, enrollments of Blacks increased to 13.0 percent of the total and of Hispanics to 6.1 percent of the total.

TABLE V-9

*Cumberland County College Student Enrollment Profile, Fall, 1976 Semester

DESCRIPTOR	Enrollment Status					
	Full-time		Part-time		Totals	
	#	%	#	%	#	%
Base Total for % Below	1015	100.0	749	100.0	1764	100.0
A. Location - 1. C. County:	888	87.5	679	90.6	1567	88.8
Millville	172	16.9	159	21.2	331	18.8
Bridgeton	292	28.7	178	23.8	470	26.6
Vineland	243	23.9	171	22.8	414	23.5
Other	181	17.8	171	22.8	352	19.9
2. Other Than C. County	127	12.5	70	9.3	197	11.2
B. Sex - Male	506	49.9	347	46.3	853	48.4
Female	509	50.1	402	53.7	911	51.6
C. Racial - Black	153	15.1	68	9.1	221	12.5
Oriental	5	.5	5	.7	10	.6
Spanish	78	7.7	22	2.9	100	5.7
American Indian	3	.3	4	.5	7	.4
Caucasian & Other	776	76.5	650	86.8	1426	80.8

*Source: "Fall Registration - 1976"

In 1970 there were 1,883 persons enrolled on a full-time basis at a college somewhere.[V-17] In 1969, the number of full-time students at Cumberland County College was 601. Thus, the College accounted for 32 percent of all college-enrolled full-time students for this period.[V-18] An update of this comparison in the upcoming 1980 census should be made.

Career Interests of Youth

In August of 1975, the Boy Scouts conducted a "Career Interest Survey" of the students in grades 9, 10, and 11 in the high schools of Cumberland County. A total of 4,682 students responded, producing 4,506 usable responses, which were used for the computation of the results. The students were asked to choose their first and second career interests from the list provided, as well as their choice of training institution, if any.

The career choices presented to the students are shown on the list on the following page. In the discussion and tables which follow, the major headings in the list are referred to as "areas," that is clusters of career choices, and the minor headings are "fields;" the code numbers shown in the list for the fields are also the codes used in the tables.

Table V-10 represents a summary of the ranking by major area of all the respondents. The top quartile includes the fields of Business, Medicine and Health Services, Construction and Industrial Trades, and Social Services.

Table V-11 indicated the rank order of area of student choice when a two-year college was shown as the preferred institution for further training. The top quartile includes the fields of Business, Medicine and Health Services, Social Services, and Art. This table shows that, if all those chosen would become full-time students, practically every field would be feasible as an offering at Cumberland County College.

The "Career Interest" list has been removed, enlarged, and reinserted on the following page.

CAREER INTEREST

AGRICULTURE
101 Agriculture
102 Horticulture

ARCHITECTURE
103 Architecture
104 Architectural Drafting

ART
105 Art
106 Fashion Design
107 Fashion Modeling
108 Interior Decorating
109 Textile Design

BUSINESS
110 Accounting
111 Advertising
112 Banking and Finance
113 Bookkeeping
114 Corporate Management
115 Economist
115 Hotel and Restaurant Management
117 Insurance/Sales + Management
118 Public Relations
119 Purchasing and Marketing
120 Real Estate
121 Salesmanship
122 Small Business Operation
123 Stenography/secretarial
124 Clerical

COMMUNICATIONS
125 Computer Programming
126 Data Processing/Key Punch
127 Hournalism/Creative Writing
128 Languages
129 Librarian
130 Radio/TV Broadcasting
131 Radio/TV Maintenance
132 Telephone Maintenance

CONSTRUCTION AND INDUSTRIAL TRADES
133 Air Conditioning/Refrigeration
134 Building Construction Technology
135 Carpentry/Woodworking
136 Electrical
137 Electronics/Instrumentation
138 Heavy Equipment Operator
139 Machinist
140 Masonry
141 Painting
142 Plumbing
143 Sheet Metal
144 Stationary Engineer
145 Welding

ENGINEERING
146 Aeronautical Engineering
147 Civil Engineering
148 Chemical Engineering
149 Electrical Engineering
150 Engineering-Drafting
151 Industrial Engineering
152 Mechanical Engineering
153 Surveying

GRAPHIC ARTS
154 Commercial Art
155 Graphic Art/Illustration
156 Photography
157 Printing

LAW AND GOVERNMENT
158 City Management
159 Fire Service and Rescue
160 Government - Civil Service
161 Government - Politics
162 Law - Attorney
163 Law Enforcement/Police
164 Parks and Recreation
165 Public Works
166 Traffic - Safety Engineer

MEDICINE AND HEALTH SERVICES
167 Chiropractor
168 Dental Assistant
169 Dental Hygienist
170 Dentistry
171 Inhalation Therapy
172 Medical Technician
173 Medicine - Doctor
174 Nursing, Practical
175 Nursing, R.N.
176 Occupational Therapy
177 Optometry
178 Osteophathic Physician
179 Pharmacy
180 Physical Therapy
181 Public Health
182 Recreational Therapy
183 Veterinary Medicine
184 X-Ray Technician

PERFORMING ARTS
185 Dramatics/Theater/Dance
186 Music/Choral, Instrumental

SCIENCE

187 Archaeology/Anthropology
188 Astronautics (space science)
189 Astronomy
190 Bio-Chemistry
191 Biology
192 Botany
193 Chemistry
194 Conservation
195 Ecology/Environmentalist
196 Fish and Game Management
197 Forestry
198 Geology
199 Mathematics/Statistics
200 Meteorology
201 Oceanography and Marine Biology
202 Physics
203 Zoology

SERVICE TRADES

204 Appliance Repair
205 Auto Body Repair
206 Auto Mechanics
207 Aviation Mechanics
208 Beautician/Barber
209 Business Machine Repair
210 Butcher
211 Cooking/Chef
212 Heavy Equipment Maintenance
213 Home Economist/Dietician

SOCIAL SERVICES

214 Clergy/Religion
215 Counseling
216 Psychology
217 Social Work
218 Sociology
219 Special Education (Handicapped)
220 Teaching
221 Youth Organizations

TRANSPORTATION

222 Airline Industry (Management)
223 Airline Operational (Hostess, Pilot)
224 Driving Occupations (Car, Bus, Truck)
225 Merchant Marines
226 Railroad Occupations

TABLE V-10

Rank Order of Youth Survey Career Choice, by Major Area Chosen

MAJOR AREA	NUMBER	PERCENT
Business	697	15.5
Med/Health	671	14.9
Const/Indus	466	10.3
Social Service	430	9.5
Services	387	8.6
Art	384	8.5
Science	263	5.8
Law/Govt	260	5.8
Transportation	199	4.4
Communication	197	4.4
Engineering	158	3.5
Perform Arts	118	2.6
Architecture	103	2.3
Graphic Arts	98	2.2
Agriculture	75	1.7
TOTAL	4506	100.0

Source: August '75 Boy Scout Career Interest Survey

TABLE V-11

Rank Order of Area by Two-Year College as Choice of Training Institution

MAJOR AREA	NUMBER	% CHOOSING AREA AND ALSO CHOOSING TWO-YEAR COLLEGE
Business	150	21.5
Med/Health	140	20.8
Social Service	66	15.3
Art	59	15.4
Communication	39	19.8
Law/Govt	37	14.2
Science	32	12.2
Const/Indus	27	5.8
Transportation	24	12.1
Graphic Arts	22	22.4
Services	20	5.2
Perform Arts	17	14.4
Engineering	14	8.9
Architecture	12	11.7
Agriculture	9	12.0
TOTAL	668	14.8 % of TOTAL (4506)

Source: August '75 Boy Scout Career Interest Survey

From the time the survey was made to the present (October '77), those students that were in grade 9 are now in grade 11; those who were in grade 10 are now in grade 12. Because of this, Tables V-12 and V-13 are most important for the following discussion. The point of importance here is students in grades 9, 10, and 11, however, showed a strong consistency of areas as well as fields chosen, although some change of choice of fields occurs sometimes within the career areas. Table V-12 represents career areas chosen by students in grade 9. Top quartile choices include Business, Medicine and Health Services, Service Trades, and Construction and Industrial Trades. Results in Table V-13 differ from Table V-12 in that the Service Trades drops as a choice and Social Services is added. This is continued to Table V-14. The trends indicated in Tables V-13 and V-14 influence the outcome of total choice as indicated in Table V-10. Taking into consideration the change indicated in choice from grade 9 to grade 10, it can be seen that the top five choices of career fields are Business, Medical and Health Services, Construction and Industrial Trades, Social Services, and Service Trades.

An examination of the top career fields and the areas within them that are most indicated by the respondents appears in Table V-15.

Using the coding sheet, we find that the most popular choices within the Business field are those of secretarial, accounting, bookkeeping, and small business operation. The top choices within the Medical/Health Services field are Registered Nurse, doctor, Licensed Practical Nurse, Veterinary Medicine, and medical technician.

The most popular choices within the field of Construction and Industrial Trades are carpentry, electrical, and machinist. Social Services indicated as top choices include teaching and social work.

TABLE V-12

Rank Order of Career Area Chosen by Those in Grade Nine Who Also Chose Two-Year College

MAJOR AREA	NUMBER	% CHOOSING AREA AND ALSO CHOOSING TWO-YEAR COLLEGE
Business	257	37
Med/Health	251	37
Services	174	45
Const/Indus	168	36
Art	153	40
Social Service	134	31
Science	92	35
Transportation	88	44
Law/Govt	88	34
Engineering	65	41
Communications	56	28
Graphic Arts	35	36
Architecture	34	33
Perform Arts	32	27
Agriculture	23	31
TOTAL	1650	37 % of TOTAL (4506)

Source: August '75 Boy Scout Career Interest Survey

TABLE V-13

Rank Order of Career Area Chosen by Those in Grade Ten
Who Also Chose Two-Year College

MAJOR AREA	NUMBER	% Choosing Area And Also Choosing Two-Year College
Med/Health	235	35
Business	225	32
Const/Indus	170	37
Social Service	159	37
Art	137	36
Service	124	32
Law/Govt	96	37
Science	92	35
Transportation	74	37
Communications	66	34
Engineering	52	33
Perform Arts	46	39
Architecture	44	43
Agriculture	29	38
Graphic Arts	29	29
TOTAL	1578	35 % of TOTAL (4506)

Source: August '75 Boy Scout Career Interest Survey

TABLE V-14

Rank Order of Career Area Chosen by Those in Grade Eleven Who Also Chose Two-Year College

MAJOR AREA	NUMBER	% CHOOSING AREA AND ALSO CHOOSING TWO-YEAR COLLEGE
Business	215	31
Med/Health	185	28
Social Service	137	32
Const/Indus	128	27
Art	94	24
Service	89	23
Science	79	30
Law/Govt	76	29
Communications	75	38
Engineering	41	26
Perform Arts	40	34
Transportation	37	19
Graphic Arts	34	35
Architecture	25	24
Agriculture	23	31
TOTAL	1278	28 % of TOTAL (4506)

Source: August '75 Boy Scout Career Interest Survey

TABLE V-15

Fields Most Frequently Chosen in Boy Scout Career Interest Survey

Major Area And Number of Fields Within Area	Total # Students Choosing Area	*Fields in Top Quartile of Area When Ranked by Choices of Students in Groups			
		All Students	Grade 9	Grade 10	Grade 11
Agriculture (2)	75	101 102	101 102	101 102	101 102
Architecture (2)	103	103 104	103 104	103 104	104 103
Art (5)	384	105,107	107	105	105
Business (15)	697	123 110 113 122	123 110 113 122	123 113,110 122 124	123 110 113,124 121,122
Communication (8)	137	130 125	130 125	130 125	125 126
Const/Indus (13)	466	135 136 139	135 136 138	135 136 145	135 136 139,142
Engineering (8)	158	152 149	152 149	152 149	150 152
Graphic Arts (4)	98	156	156	156	156
Law/Govt. (9)	260	162 163	162 163	162 163	162 163
Med/Health (18)	671	175 173 174 183 172	173 175 174 183 170	175 174 173 183 172	175 174 183 173 168

-continued-

TABLE V-15 (continued)

Major Area And Number of Fields Within Area	Total # Students Choosing Area	*Fields in Top Quartile of Area When Ranked by Choices of Students in Groups			
		All Students	Grade 9	Grade 10	Grade 11
Perform Arts (2)	118	186	186	186	186
		185	185	185	185
Science (17)	263	196	196,201	196	201
		201	191,203	201,203	191
		191	187	197	196,197
		203	188,190,202	191	199
			195,197		187
Services (10)	387	206	206	206	206
		208	208	208	208
		205	205	205	205
Social Service (8)	430	220	220	220	220
		217	217	217	216
Transportation (5)	199	223	223	223	223
		224	224	224	224

Source: August '75 Boy Scout Career Interest Survey, *Codes for fields are same as on Career Choices List (p. 71) ¢ tied field are on same line or grouped.

Programming Design and Strategy

Assessment of the present program offerings of the College together with an assessment of the offerings of other postsecondary institutions serving Cumberland County provide the backdrop for designing future programming options for the community college. The planning process must enable the College to examine the effectiveness of present programs as well as the potential for new or modified programs needed by the public. The strategy employed by some institutions has been to develop programs only where proven need and opportunities for placement in the employment market exist. This is in sharp contrast to some other institutions which have pursued a strategy of establishing programs which are exotic or popular even though placement opportunities may not reside in that service area. They justify this strategy by observing that a community college has a responsibility to provide access and future socio-economic mobility for its clientele even if it results in an out-migration for that area.

The consultant team proposes a more eclectic strategy for Cumberland County College.

Framework for Program Planning

The consultant team proposed that Cumberland County College utilize a planning framework for its educational programming. This framework would be the occupational clusters identified by the U.S. Office of Education and which had been integrated with the reporting systems developed through the National Center for Higher Education Management Systems. It should be observed here that the 1975 boyscout "career interest survey" reported in Chapter V utilized the occupational cluster framework for it survey instrument (see Table V-15). There

The Service Trades most often chosen are auto mechanics, beautician, and auto body repair.

By comparing this information with Table V-11, we find that the career areas most likely to be successful offerings at Cumberland County College are, in addition to those in the Business, Medical and Health, and the Social Service areas are those in Art and Communication. The top choices in Art being art and fashion modeling; and, the top fields in communications being radio/TV broadcasting and computer programming.

Tables V-16 and V-17 indicate this comparison between the top choice fields within areas indicated as having a high priority by total and by two-year college as choice of training institution and whether or not such a program exists at Cumberland County College. Some fields, for example, medicine within the Medical/Health area are entirely out of consideration for this study. Others, especially within the Construction and Industrial area, however, would be quite feasible for consideration at the College.

The Youth Survey also provided data of less direct relationship to planning at the College, but which, if pursued further, could be useful, especially if the inquiry were to be updated. The data in Table V-18 and V-19, for example, show the areas and percentages of students in the survey indicating interest in attending a vocational-technical school and four-year college, respectively. Further, at the request of the consultant team data from the Boy Scout youth survey for 1976, not fully available as described above for 1975, were obtained showing career choices by male and female students and by the locations of their high schools. The results are shown in Table V-20.

TABLE V-16

Top Fields Within Major Areas by Those Already in Existence at Cumberland County College as a Program

CODE	FIELD NAME	IN EXISTENCE	
		Yes	No
105	Art		X
107	Fashion Modeling		X
110	Accounting	X	
113	Bookkeeping		X
122	Small Business Op.		*X
123	Secretarial	X	
125	Computer Programming	X	
130	Radio/TV Broadcast		X
172	Medical Technician		X
173	Doctor		X
174	LPN		*X
175	RN	X	
183	Veterinary Medicine		X
217	Social Work		*X
220	Teaching	X	
135	Carpentry		X
136	Electrical		X
139	Machinist		X

*With modification of existing programs, these have potential for development at Cumberland County College.

TABLE V-17

Existence Within Cumberland County College Program of Fields of Specialized Interest Falling in Upper Quartile of Choice Expressions in Youth Interest Survey; By Major Areas of Speciality

AREA/CODE		N=Total # of Fields in Area	FIELD	IN EXISTENCE	
				No	Yes
Agriculture	101	2	Agriculture	X	
	102		Horticulture	X	
Architecture	103	2	Architecture		X
	104		Drafting, Arch.		*X
Art	105	2	Art		X
	107		Fashion Modeling		X
Business	123	4	Steno	X	
	110		Accounting	X	
	113		Bookkeeping		X
	122		Small Bus. Op.		*X
Communication	130	2	Radio/TV Broadcast		X
	125		Comp. Programming	X	
Construction	135	3	Carpentry		X
	136		Electrical		X
	139		Machinist		X
Engineering	152	2	Mech Engineer		X
	149		Elec Engineer		X
Graphic Arts	156	1	Photography		X
Law/Govt	162	2	Attorney		X
	163		Police	X	

-continued-

TABLE V-17 (continued)

AREA/CODE		N=Total # of Fields in Area	FIELD	IN EXISTENCE Yes	No
Med/Health	175	5	RN	X	
	173		Doctor		X
	174		LPN		*X
	183		Veterinary Med		X
	172		Med Tech		X
Perf. Arts	186	2	Music/Choral		X
	185		Dance/Drama/Thea		X
Science	196	4	Fish & Game		*X
	201		Oceanography		X
	191		Biology		X
	203		Zoology		X
Services	206	3	Auto Mechanic		X
	208		Beautician		X
	205		Auto Body		X
Social Svc.	220	2	Teaching	X	
	217		Social Work		*X
Transportation	223	2	Airline Operational		X
	224		Driving		X

*With modification of existing programs, these have potential for development at Cumberland County College.

TABLE V-18

Rank Order of Areas Chosen by Students Interested in a Vocational-Technical School

MAJOR AREA	N	% CHOOSING AREA AND ALSO CHOOSING VOC-TECH CENTER
Construction	123	26.4
Services	86	22.2
Med/Health	57	8.5
Art	43	11.2
Business	29	4.2
Engineering	25	15.8
Transportation	21	10.5
Communication	19	9.6
Graphic Arts	14	14.3
Law/Government	10	3.8
Architecture	10	9.7
Science	8	3.0
Social Science	8	1.8
Perform Arts	6	5.0
Agriculture	4	5.3
TOTAL	463	10.3 % of Total (4506)

Source: August '75 Boy Scout Career Interest Survey

TABLE V-19

Rank Order of Areas Chosen by Students Interested in a Four-Year College

MAJOR AREA	N	% CHOOSING AREA AND ALSO CHOOSING FOUR-YEAR COLLEGE	
Med/Health	323	48.1	
Social Science	287	66.7	
Science	146	55.5	
Law/Government	136	52.3	
Business	128	18.4	
Art	74	19.2	
Communication	65	32.9	
Engineering	59	37.3	
Architecture	59	57.2	
Perform Arts	48	40.6	
Transportation	35	17.6	
Construction	26	5.6	
Graphic Arts	23	23.4	
Services	16	4.1	
Agriculture	11	14.6	
TOTAL	1436	31.9	% of Total (4506)

Source: August '75 Boy Scout Career Interest Survey

TABLE V-20

Youth Career Interest Survey, Student Choices, By Sex and Location*

FIELD	Tot. #	SEX M	SEX F	VINELAND	BRIDGETON	MILLVILLE	OTHER
Secretary	528	0	528	199	133	93	94
Auto-Mech	391	387	4	164	93	49	78
Teacher/Counselor	372	70	302	152	89	85	44
Lawyer/Judge	251	155	96	108	61	42	35
Pilot/Stewardess	252	106	146	111	64	39	37
Artist	245	112	133	92	57	43	51
Reg. Nurse	240	0	240	72	83	40	39
Fashion Design	206	0	206	59	84	32	28
Fish/Wildlife	202	182	20	63	49	51	38
Veterinary	203	61	142	64	60	41	35
Farm/Ranch	172	106	66	37	53	31	47
Child Care	169	2	167	54	53	31	29
Carpentry	171	171	0	52	35	47	34
Architect	162	134	28	70	39	30	22
Law Enforcement	163	127	36	75	32	27	23
Accounting	149	64	85	63	37	32	17
Doctor (Spec)	152	70	82	76	39	19	14
Driving/Transp.	131	123	8	44	44	18	24
Elec. Trades	129	126	3	50	36	23	20
Musician	130	60	70	50	44	26	10
Barber/Cosmet.	119	4	115	40	29	16	26
Practical Nurse	109	1	108	30	28	23	23
Doctor (GP)	108	51	57	44	38	13	11

-continued-

TABLE V-20 (continued)

FIELD	Tot. #	M	F	VINELAND	BRIDGETON	MILLVILLE	OTHER
Drama/Dance	101	17	84	51	25	12	11
Auto Body	97**	95	2	30	29	16	21
TOTAL	4954	2226	2728	1850	590	879	811

*Only field chosen by 100 or more students reported
**Five responses not tabulated
Source: 1976, Boy Scout Youth Interest Survey.

Quality of Life and Cultural Patterns

Not to be overlooked in the planning process, cultural activities should be part of the total concern of the institution in serving the local community. The availability of such programs will increase public awareness of the College as an institution that can serve more than the academic needs of the community.

Programs in the Arts Available in Cumberland County

Primary to the concern of the college's Program Coordinating Committee, cultural events are increasingly becoming a major offering of the institution. Taking care to promote events in the "fine and performing arts, sports, guest speakers, educational entertainment, artist-in-residence type programs, short-term workshops," and other activities, the committee seeks to serve a cross-section of community cultural needs.[V-19]

An indication of the college's extending to the community the opportunity to satisfy the cultural aspect of life is evident in the offerings for the 1977-78 season. Included are a wide variety of "Celebrity Series" events ranging from plays and guest speakers to dance troupes and musical presentations.[V-20] In addition, the Library plans continued display and exhibition of various artists' works throughout the year.

Evidence of Interest for Increase in Such Programs

A survey sent by the College to members of the College Advisory Committee and to key officials in human resource agencies reveals that the cultural needs of the community are not being adequately met. According to some, the College could do more work in the area of promoting cultural programs for the local area. It seems that people who really care about serious cultural events have to travel to Philadelphia or New York to fulfill their craving for the arts.

The Cumberland County area seems to be relatively devoid of any serious cultural events and the College could well serve the community by increasing such presentations. Not entirely the fault of the College, however, is the seeming lack of interest expressed by the residents of the County as evidenced by reportedly poor attendance at such events when they are offered.

Other External/Internal Development Trends

Since the community represented by the service area of the community college is a component of the State, region, and nation, other broad developments which could influence the program of the College must be studied. In a sense, these other factors represent the "futures" of market analysis whereby the planning process examines the question of "what may be?" These broad external and internal factors do not lend themselves to as much analysis of hard data as the three previous areas discussed. They are vital to the ability of the College to play a role in fostering further development of the area and providing opportunities for the citizenry, however.

There are a number of factors that are independent of the local educational needs that will influence the development of the College. Among these are the influence of the east-west and the north-south corridors, the emerging influence of off-shore oil drilling, and the recent legislation allowing gambling to take place in the State of New Jersey. In addition, the shift of the population from rural to urban areas is notable.

Philadelphia/Camden-Atlantic City Corridor

With the completion of the Atlantic City Expressway, Cumberland County was made easily accessible from the Philadelphia/Camden/Wilmington areas.[V-21] Although far enough away from these major centers to develop independently, the opening of new roads and bridges has contributed immensely to the local problems associated with growth. The planning board realized that to control this influence would be the best course of action for the years ahead. In 1970 the net in-migration was 2,206. This accounted for 15 percent of the growth in population from 1960 to 1970. For the period 1970 to 1980, however, the planning board expects in-migration to equal natural increases for a total net growth of 20 to 25 percent.[V-22]

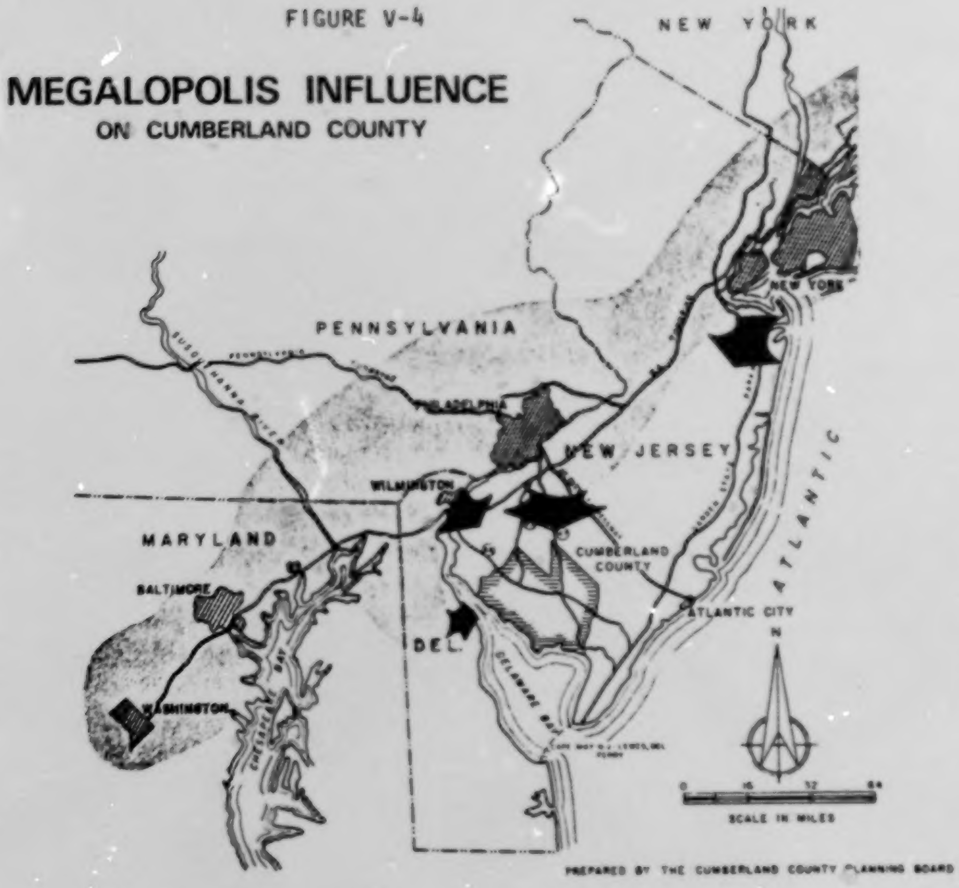
New York-Washington/Baltimore Corridor

Because of its geographic proximity to the Philadelphia/Camden area, Cumberland County has always been under the influence of this area. With the realization of the Delaware Memorial Bridge and the Cape May-Lewes Ferry, the importance of the New York-Washington/Baltimore influence will be greater felt[V-23] in the years ahead.

Because the County area has been relatively isolated from this influence in the past, the opening of this transportation corridor will contribute much to the development in the future. Figure V-4 illustrates the relative position of the current Washington-New York megalopolis and Cumberland County. Arrows represent patterns of influence as they are directed at the County.

The County Planners are concerned with the expansion of the influence of these areas as they encroach upon the County. Increased population

FIGURE V-4



MEGALOPOLIS INFLUENCE
ON CUMBERLAND COUNTY

NEW YORK
PENNSYLVANIA
NEW JERSEY
MARYLAND
DEL.
ATLANTIC
NEW YORK
PHILADELPHIA
WILMINGTON
BALTIMORE
WASHINGTON
CUMBERLAND COUNTY
ATLANTIC CITY
SUSQUEHANNA RIVER
CHESAPEAKE BAY
DELAWARE BAY
N
0
16
32
64
SCALE IN MILES

PREPARED BY THE CUMBERLAND COUNTY PLANNING BOARD

Source: CCPB Urbanization, p. 55.

and the extra burdens associated with the increases are of primary importance here. Some areas of the County are already extremely densely populated (See Figure V-2) and 8.4 percent of the population lives in only 40 percent of the land area.[V-24]

Off-Shore Oil

Early in 1975[V-25] the Planning Board became increasingly aware of the impact of off-shore oil field leasing on the County. At that time the Board neither opposed nor condoned the increased leasing of this underwater land space for the purpose of exploration. It was, however, concerned with the impact that such increases would have on marine life within the boundries of the County.

The College has responded to the call for concern over off-shore drilling with a proposal to begin programs in Marine Occupations and Petroleum Technology.[V-26]

New Jersey Gambling in Atlantic City

As a result of the recently enacted statute in New Jersey permitting gambling in Atlantic City, a new catalyst to spur economic development in that city and the surrounding area is expected to operate. Consistent with its role as a community college, Atlantic County College has already moved forward to develop instructional programs related to the new gambling industry and related hotel-restaurant trades. The effects of the new economic activity, however, is expected to reach beyond the immediate Atlantic City area. Because Cumberland County is located, as already noted, on a major inter-city linkage between Atlantic City and the Philadelphia/Camden complex, hotel-motel-restaurant and tourist activity in Cumberland is also expected to increase. The College is watching these developments closely.

Agriculture (Rural) to Urban Shift

The 1970 census data reveals that only 4,800 people live on rural farms in the County. This is only 4 percent of the total population. According to the Planning Board the shift has been away from the agricultural regions since 1955. Although 73.3 percent of the population is urban, the remaining 22.7 percent live in open rural non-farm settings. This indicates a shift in the place of residence to a non-farm setting, and a decrease in the amount of the population committed to agriculture as a way of life.[V-27] Indeed, the agricultural industries employed 10 percent of the labor force in 1960, but only 6 percent in 1973.[V-28] This indicates a decreasing participation of the labor force engaged in agriculture as well as a shift of the population to more urbanized areas.

College Program and Enrollment Projections

The consultant team acknowledges the vulnerability of any college program and enrollment projections based on the data analyzed throughout this chapter. In many cases the data are obsolete and out-of-date. In other cases, the data were collected for different purposes and thus could be skewed from an institutional planning standpoint. Nevertheless, Cumberland County College has an opportunity to develop a community needs assessment plan and strategy which will afford defensible information for subsequent planning of the College. At the same time, the planning team is of the opinion that sufficient information is yielded by the studies and survey information analyzed in this chapter to make some projections for the college's programming for the 80s. The program projections will be treated primarily in Chapter VI while enrollment will be treated in the remainder of this chapter.

Because Cumberland County is Cumberland County College's primary service area, the size of the population in the County is the best overall indicator of the number of students the College will likely attract. The first step taken in attempting to project the College enrollments for a decade ahead was to examine more closely the trends now evident in the county population.

Population Projections

In 1973, the Cumberland County Planning Board (CCPB) projected the population for the County in three ranges. Indicated in Table V-21, these projections were very optimistic even in the "Low" category. It was expected that there would be a rapid growth in the population, and that the trend evident from 1960 to 1970 would continue well beyond the year 1990. In 1976, the New Jersey Department of Labor & Industry estimated the growth of the County from 1975 to 1985 on the basis of growth from 1970 to 1975. This is also indicated in Table V-21.

For purposes of plan development at Cumberland County College, the CCPB and New Jersey Labor & Industry projections were both used. This was done by the consultant team by revising the CCPB estimates according to the more recent 1975 data used in the Labor & Industry projections. Table V-22 shows the resulting revised CCPB estimates based upon Labor & Industry information for 1975. The Labor & Industry population for the County in that year was used as the "Low" for the CCPB figures and the CCPB projected growth rates were applied to the new 1975 base figure. Figure V-5 indicates the relationships presented in Table V-21; Figure V-6 for Table V-22.

The upshot of these projections is that the total population is expected to grow, but the demographers disagree as to just how much between 1975 and 1990. The lowest expected increase from the 1975

TABLE V-21

Cumberland County Planning Board and New Jersey Labor and Industry Population Projections for Cumberland County

YEAR	CCPB			New Jersey Labor & Industry	
	Low	Medium	High	Low	High
1960*	106,850	106,850	106,850	106,850	100,850
1970*	121,374	121,374	121,374	121,374	121,374
1975	^{c}132,100	132,900	133,700	**129,085	**129,085
1980	^{c}146,300	149,250	152,000	131,800	138,000
1985	^{c}163,400	169,500	175,400	134,890	147,770
1990	^{c}183,400	193,500	203,700	137,800	156,700

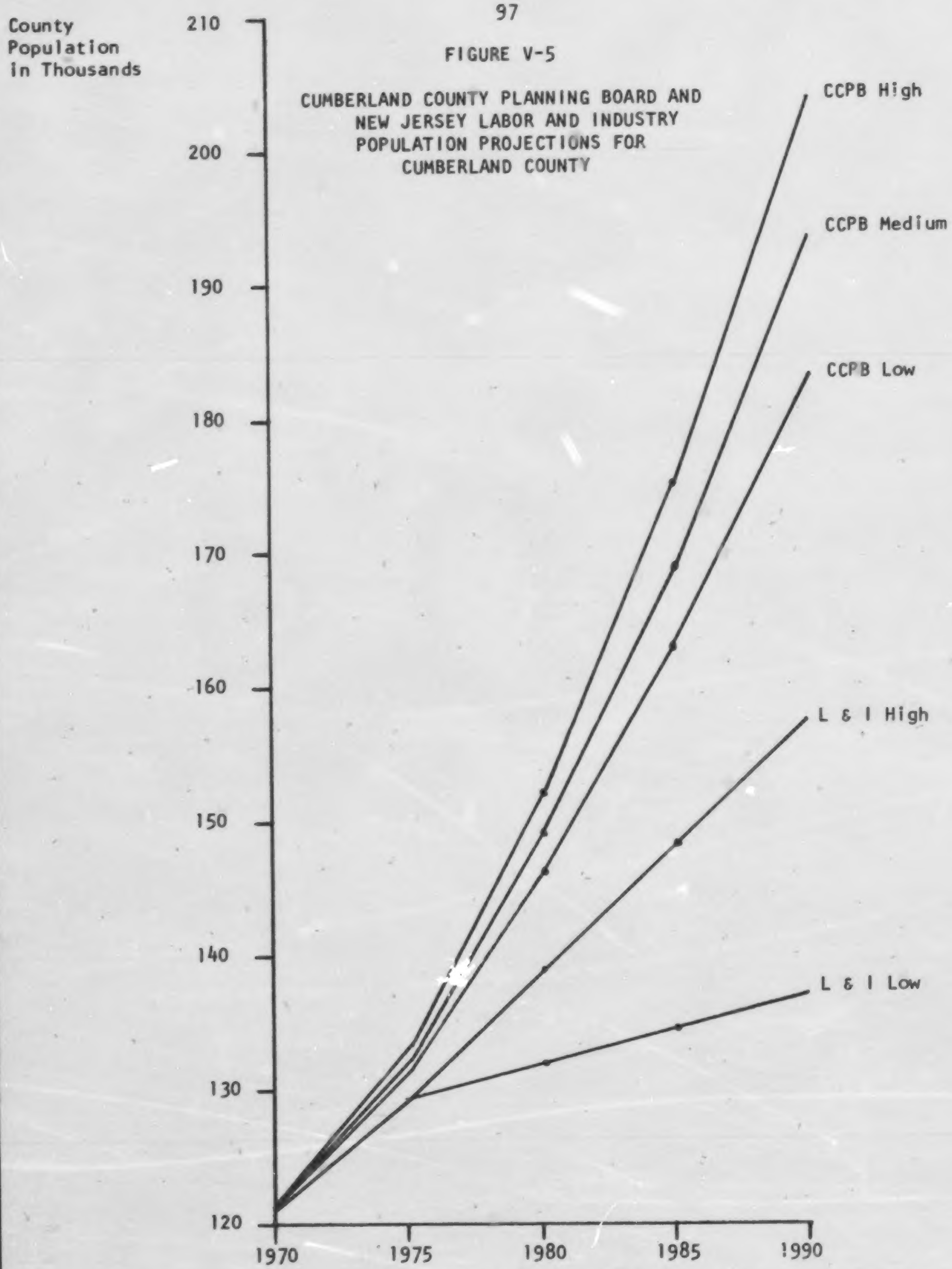
*U.S. Census Information

**New Jersey Department of Labor & Industry "Official State Estimates"

^{c}Estimated by CCPB using 1970 Census Information

FIGURE V-5

CUMBERLAND COUNTY PLANNING BOARD AND NEW JERSEY LABOR AND INDUSTRY POPULATION PROJECTIONS FOR CUMBERLAND COUNTY



Source: CCPB Population 1970, New Jersey Department of Labor & Industry, "Official State Estimates"

TABLE V-22

Revised Population Projections for Cumberland County

YEAR	CCPB			NEW JERSEY LABOR & INDUSTRY	
	Low	Medium	High	Low	High
1960*	106,850	106,850	106,850	106,850	106,850
1970*	121,374	121,374	121,374	121,374	121,374
1975	**129,085	129,748	130,355	**129,085	**129,085
1980	[c]139,458	141,643	143,706	131,800	138,000
1985	[c]152,081	156,451	160,820	134,890	147,770
1990	[c]166,646	174,050	181,090	137,800	156,700

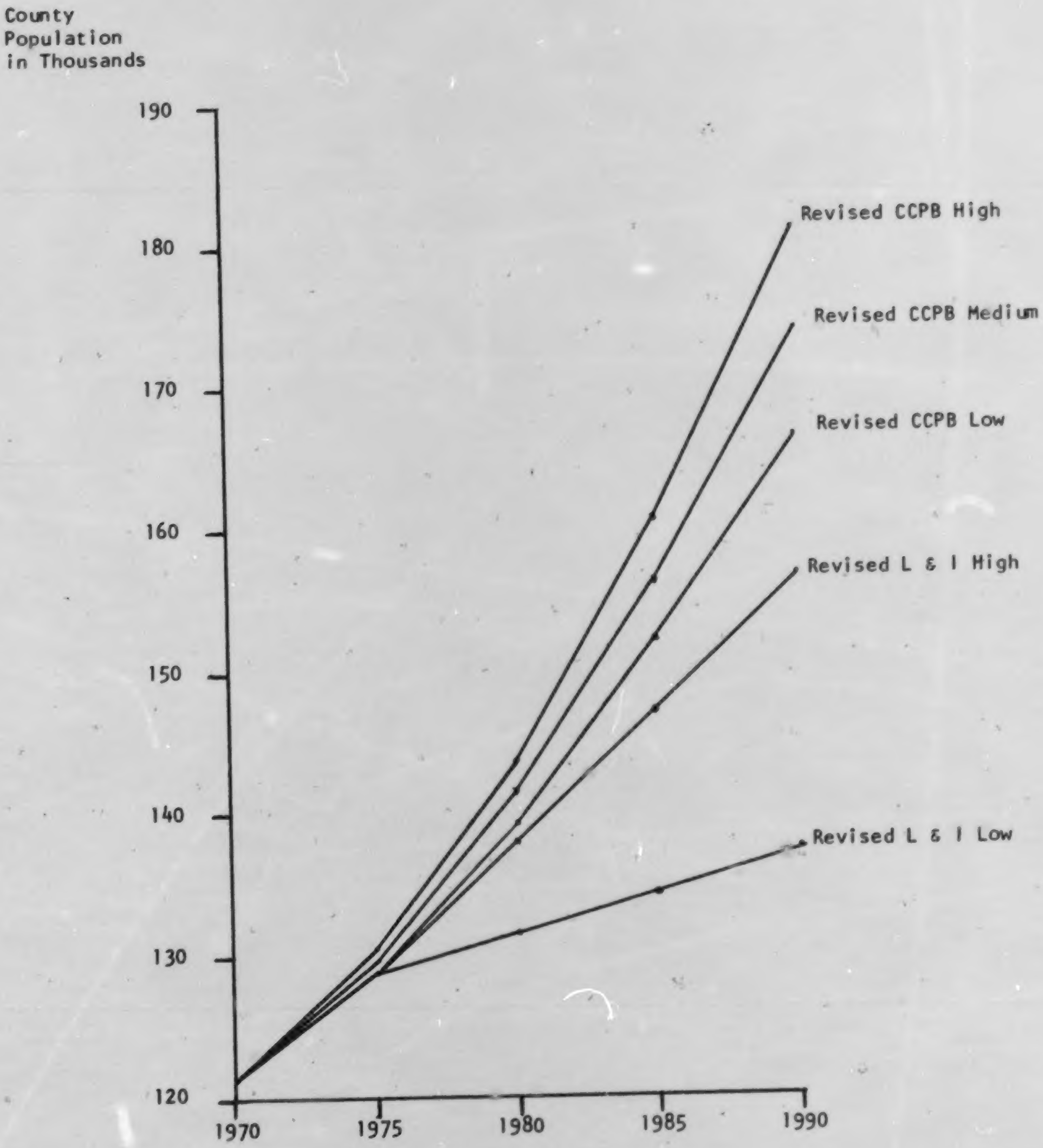
*U.S. Census Information

**New Jersey Department of Labor & Industry "Official State Estimates"

[c] CCPB Estimates Revised by Consultant Team based upon Labor & Industry information for 1975

FIGURE V-6

REVISED POPULATION PROJECTIONS
FOR CUMBERLAND COUNTY*



*As Revised by Consultant Team.

figure of 129,085 is by the New Jersey Labor & Industry and projects 137,800 people in the County by 1990, an increase of only 8,715, or 6.8 percent; the highest is to 181,090, by the CCPB, and increase of 52,005, or 40.3 percent.

Before moving to projections of college enrollments based on these projections some attention should be given to shifts within the population that may well affect the number of persons seeking to enroll in the decade ahead.

Population Shifts

Cumberland County is experiencing a shift in its population concentration. From 1960 to 1970, Vineland grew quickly, increasing its population by almost 10,000. Millville experienced some growth, and Bridgeton a drop, during this same time. The Department of Labor and Industry evaluated the localities, and found the information represented in Table V-23. Growth is expected in every center with Vineland taking the lead in gross numbers. Figure V-7 presents the information in Table V-23. It can be seen that Vineland will draw the most number of people, and that more people will choose to live in the combined areas of Millville and Bridgeton than in other locales. All three centers will grow but at different rates.

Figure V-8 indicated this information in terms of population as a percentage of total county population. It is expected that Vineland will contain 41 percent of the County by 1990, and that the Vineland-Millville-Bridgeton SMSA will contain 72 percent of the residents of Cumberland County.

TABLE V-23

Population Centers in Cumberland County

YEAR	VINELAND	MILLVILLE	BRIDGETON	OTHERS	TOTAL
1960*	37,685	19,096	20,966	29,103	106,850
1970*	47,399	21,366	20,435	32,174	121,374
1975**	50,930	22,700	21,540	33,915	121,085
1980^c	55,000	24,000	22,400	36,600	138,000
1985**	59,207	25,062	23,240	40,261	147,770
1990^c	63,500	26,500	24,000	42,700	156,700

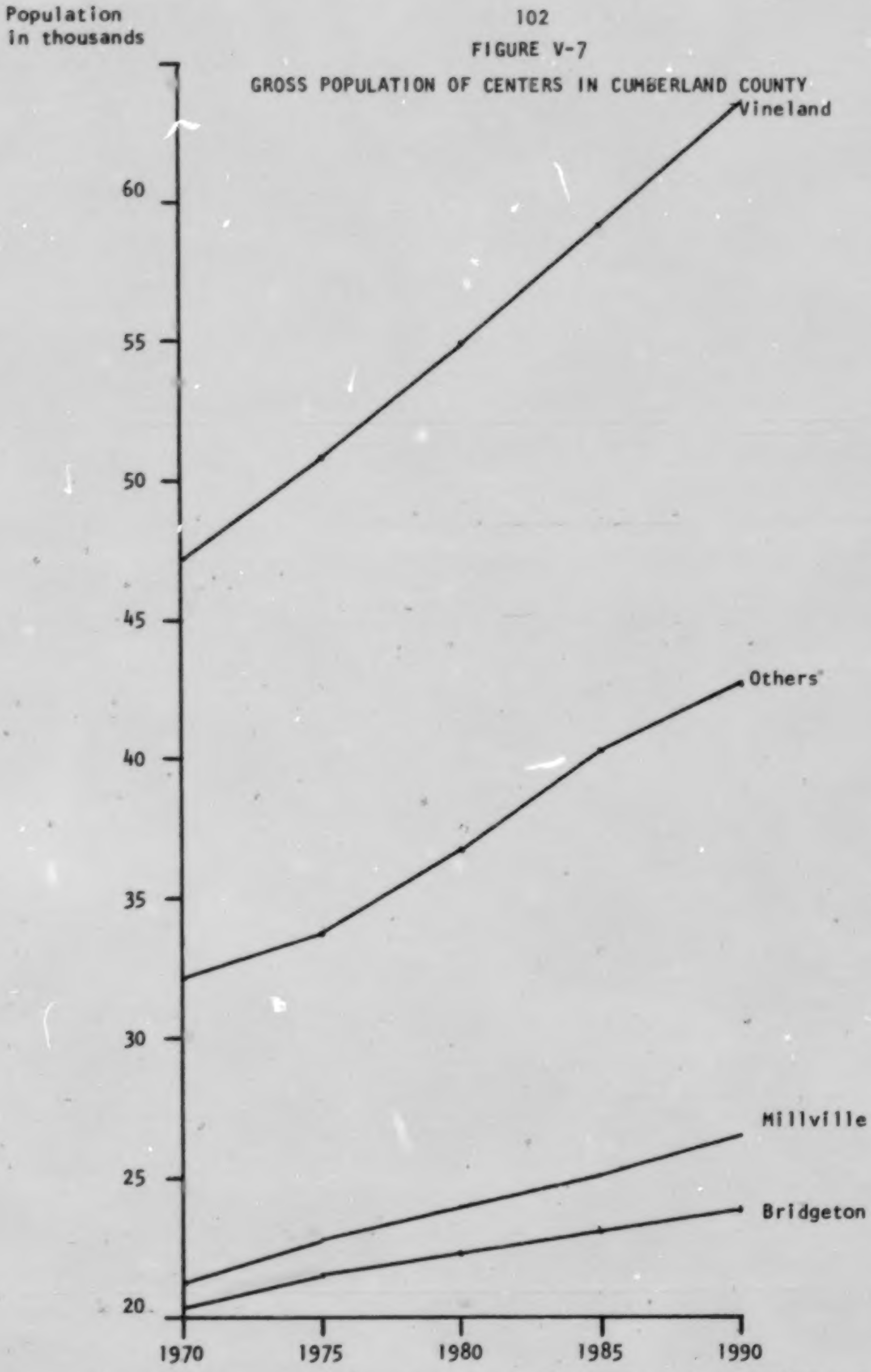
*U.S. Census Information

**New Jersey Department of Labor & Industry Information for 1975 and 1985

^{c}Projection using Labor & Industry Information for 1975

FIGURE V-7

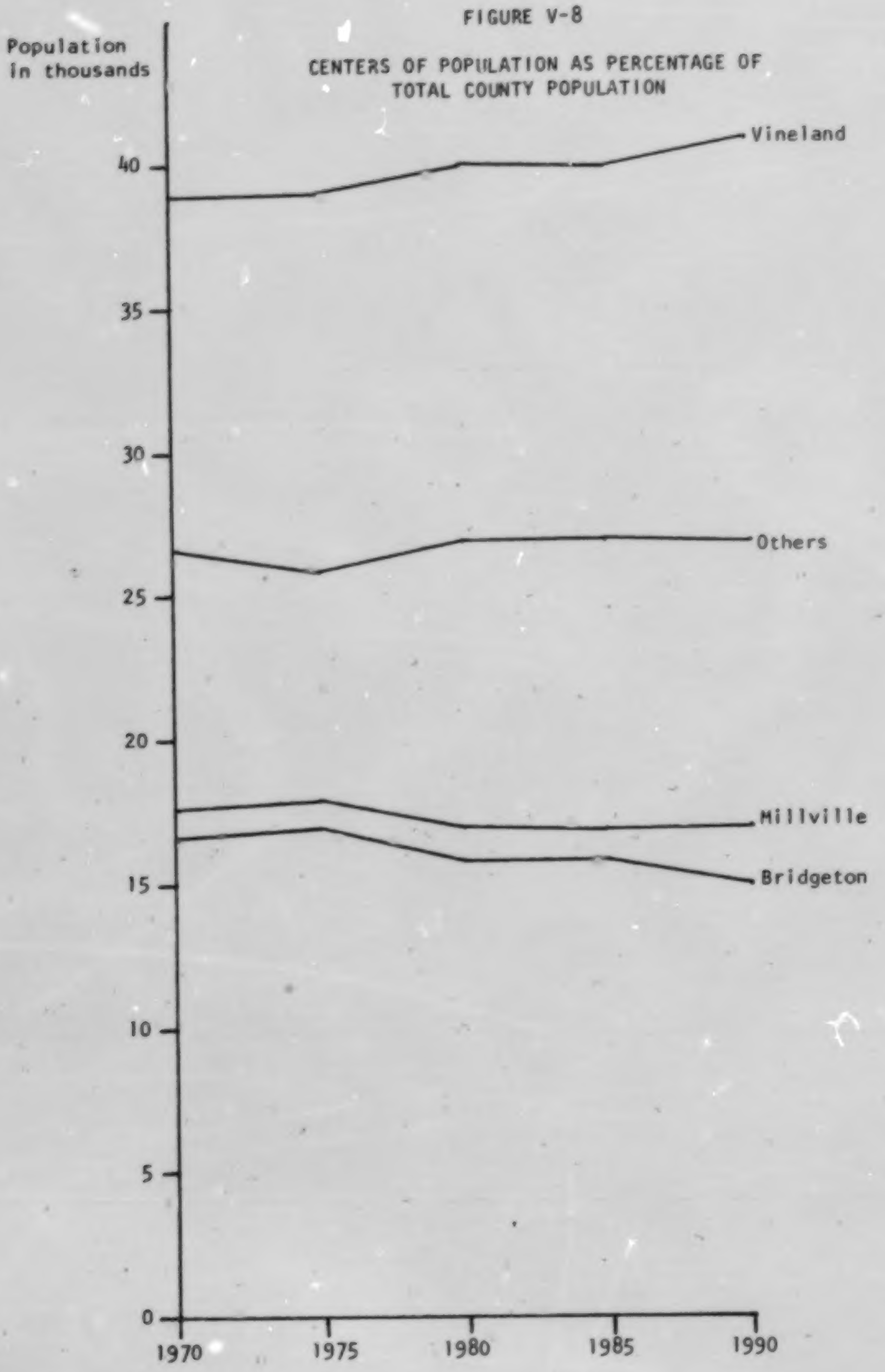
GROSS POPULATION OF CENTERS IN CUMBERLAND COUNTY



Source: New Jersey Department of Labor & Industry "Official State Estimates"

FIGURE V-8

CENTERS OF POPULATION AS PERCENTAGE OF TOTAL COUNTY POPULATION



Blacks and Spanish Speaking Groups

In 1960, the Black population of Cumberland County was 12.2 percent of the total. In 1970, this increased to 13.6 percent. During the Fall 1976 Semester at Cumberland County College, Blacks accounted for 15 percent of the full-time, and 7.6 percent of the part-time enrollment.

The term "Spanish-speaking" seems to create a problem for analyzing population make up. Census information for 1970 makes a distinction between Spanish-speaking and Puerto Rican; 1960 information does not. In 1970, the Spanish-speaking accounted for 5.5 percent of the county population, and Puerto Rican 4.5 percent. The College, in its enrollment report for Fall 1976, indicates that "Spanish" students were 9 percent of the full-time, and 2.9 percent of the part-time totals.

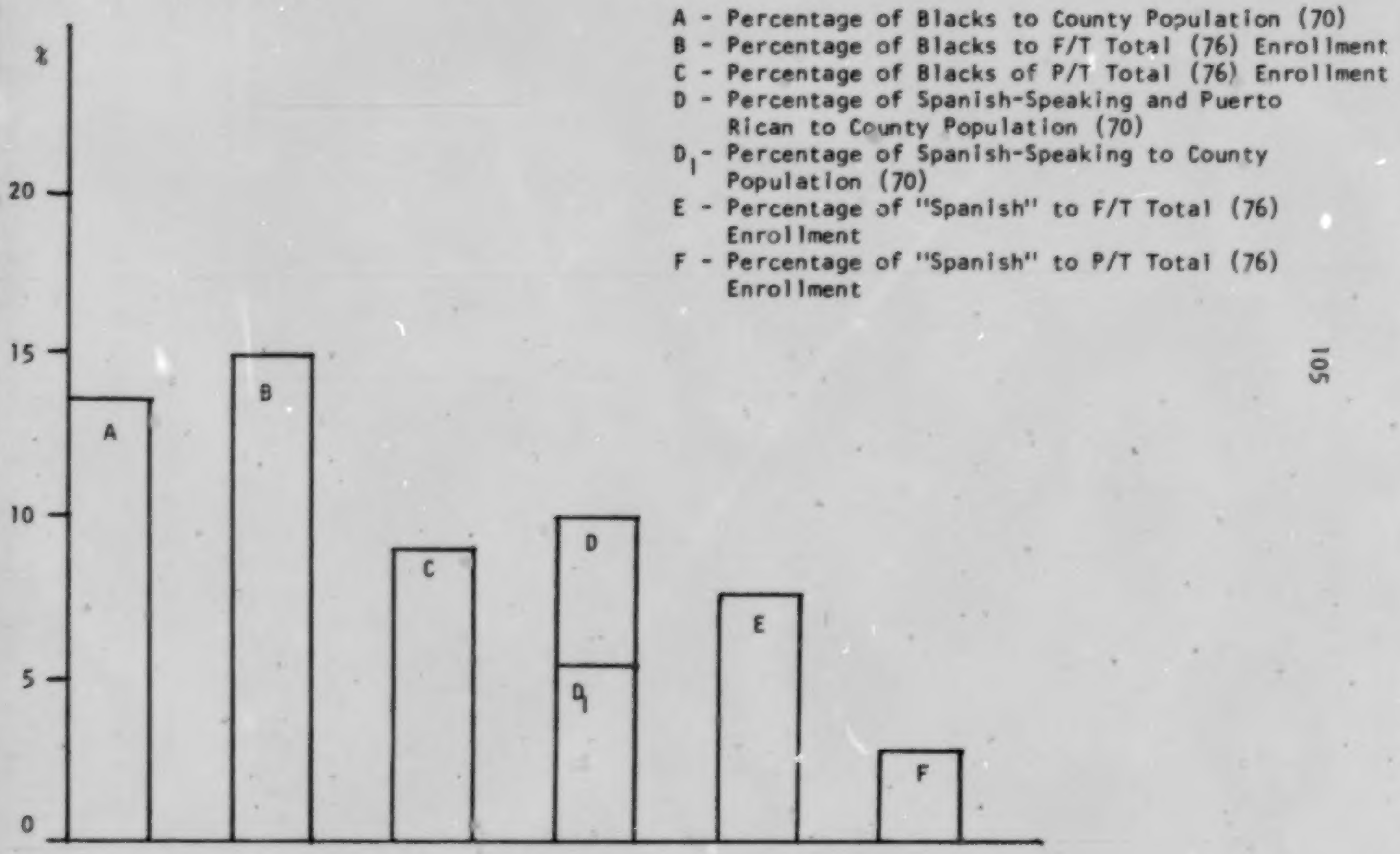
Figure V-9 indicates the relationship of the full-time and part-time enrollment of these groups at Cumberland County College to that percentage of each group to the total county population. Blacks seem to be served well, but some work is indicated in order to attract the Spanish-speaking and Puerto Rican segment.

Age Groups

Basic to forecasts of enrollments at Cumberland County is the relative ages of the population the College serves. Projections of the county's population by age groups have not been made either by the CCPB or state demographers. Such projections are needed badly, however, and the consultant team developed an illustrative case as shown in Table V-24. They emphasize the "illustrative" feature because the effort shown to establish the age groups does not allow for any in- or out-state migration (no data on such migration are available). With this caveat in mind, the importance of shifts in age groups can be illustrated as follows.

FIGURE V-9

PERCENTAGE COMPARISONS OF COLLEGE ENROLLMENT AND COUNTY POPULATION FOR BLACKS AND SPANISH SUB-GROUPS



*Source: Fall Registration - 1976

TABLE V-24

Percentage Changes in Cumberland County Population, Total and by Selected Age Groups, 1960-1990

	1960		1970		1980		1990	
AGE GROUP	N	CHANGE OVER 10 YEARS	N	CHANGE OVER 10 YEARS	N	CHANGE OVER 10 YEARS	N	CHANGE OVER 10 YEARS
<10	21,605		23,445	8.5				
10-19	17,335		22,536	30.0	23,445	4.0		
20-29	12,290		16,494	34.2	22,536	36.6	23,445	4.0
30-39	15,312		13,233	(13.6)	16,494	24.6	22,536	36.6
40-49	14,464		14,908	(3.1)	13,233	(11.2)	16,494	24.6
50-59	11,095		13,463	21.3	14,908	10.7	13,233	(11.2)
60+	14,749		17,295	17.3	*21,271	22.9	**23,555	10.7
TOTAL	106,850		121,374	13.6	141,643[c]	16.7	174,050[c]	22.9

NOTE: Since no in- or out-state migration is considered, these projections are illustrative of methodology only

*50-59 year old cohort of 1970 census (13,463) plus cohort of persons 70 years of age and older (7,808) in 1970.

**50-59 year old cohort of 1980 (14,908) plus an estimated cohort (8,647) of persons 70 years of age and older based on the percentage (58.0) that the latter was of the 50-59 year old cohort in 1980 calculation.

[c] CCPB "Medium" projection as revised by consulting team.

The actual 1960 and 1970 census data by selected age groups and the CCPB "medium" estimates of total population as revised by the consultants is shown in Table V-24. We should first notice that the estimated increase in the county's total population is expected to be 16.7 percent in 1980 over 1970 and 22.9 percent in 1990 over 1980. Keeping this in mind, note should then be taken that the age groups in which the College will be most concerned for the foreseeable future will also show increases in 1980 over 1970 and 1990 over 1980. This is especially notable with respect to the 20-29 and 30-39 year olds in the population.

Enrollments Projected

Recognizing that the more subtle shifts in population make up in such traits as race, ethnic group, age, and geographic location will affect college enrollments depending on what the College does to adjust to the shifts as they develop, the procedure in this planning report turns to the base consideration--the overall size of the population. Comparing the Fall 1975 and Fall 1976 total full-time equivalent enrollments (1301 and 1288) and the 1975 county population 129,085, the relationship seen is the total FTE enrollment being almost exactly 1.0 percent of the total population. The consultants believe that this is a minimum and that, if the College acts to extend its programs and services as recommended, enrollments of 1.5 or even 2.0 percent of the county gross population are feasible.

In such a case, two factors will generate growth in college enrollment: (1) overall population growth and (2) increase in the percentage of total population reached by the College. If assumptions of the relationship of total fall FTE to total county population of

1.0, 1.5, or 2.0 percent are made and applied to each of four of the total population projections shown in Table V-2, a total of twelve college enrollment projections result. The actual figures appear in Table V-25.

Depending on the combination of total population of Cumberland County selected along with the lowest (1.0) and the highest (2.0) assumption of percentage relationship of total fall FTE to total population; college enrollment growth from the figure of 1,290 used for Fall 1975 to as low as 1,378 or as high as 3,620 by 1990 can be forecast. Since the Fall 1977 total FTE (1,368) is approaching the 1990 projection using both the lowest total population and lowest percentage assumption, some question can be raised about keeping that combination for planning purposes. Since it is not known, however, whether the more favorable total FTE for the College in the Fall of 1977 is due to total county population increase or the effect of the college's heightened outreach program, the lowest total population projection as a base should not be hastily discarded. Rather the College should start now to monitor more closely both factors so that the trend of actual developments during the next few years can be interpreted more accurately to the range of possibilities shown in Table V-25.

TABLE V-25

Population Projections Related to Potential Total Fall FTE* Enrollment

	LOWEST POPULATION PROJECTION				CONSERVATIVE				MODERATE				HIGH			
YEAR	Pop. Growth[1]	1%	1.5%	2.0%	Pop. Growth[2]	1%	1.5%	2.0%	Pop. Growth[3]	1%	1.5%	2.0%	Pop. Growth[4]	1%	1.5%	2.0%
1975	129,085	1290			129,085	1290			129,085	1290			130,355	1303		
1980	131,800	1318	1977	2636	138,000	1380	2070	2760	139,458	1394	2091	2788	143,706	1437	2156	2874
1983**									147,031	1470	2250	2940				
1985	134,890	1348	2022	2698	147,770	1477	2216	2954	152,081	1520	2280	3040	160,820	1608	2412	3216
1990	137,800	1378	2067	2756	156,700	1567	2351	3134	166,646	1666	2499	3332	181,090	1810	2715	3620

[1] From Table 22 Column 4

[2] From Table 22 Column 5

[3] From Table 22 Column 1

[4] From Table 22 Column 3

*Total Fall FTE for 1975 was 1301; for fall 1976, 1288; almost exactly 1% of the population estimate shown in Table V-22

**1983 estimate made only for moderate assumptions for use in discussion of budget projections in Chapter VIII.

FIGURE V-10

ENROLLMENT PROJECTION-LOW

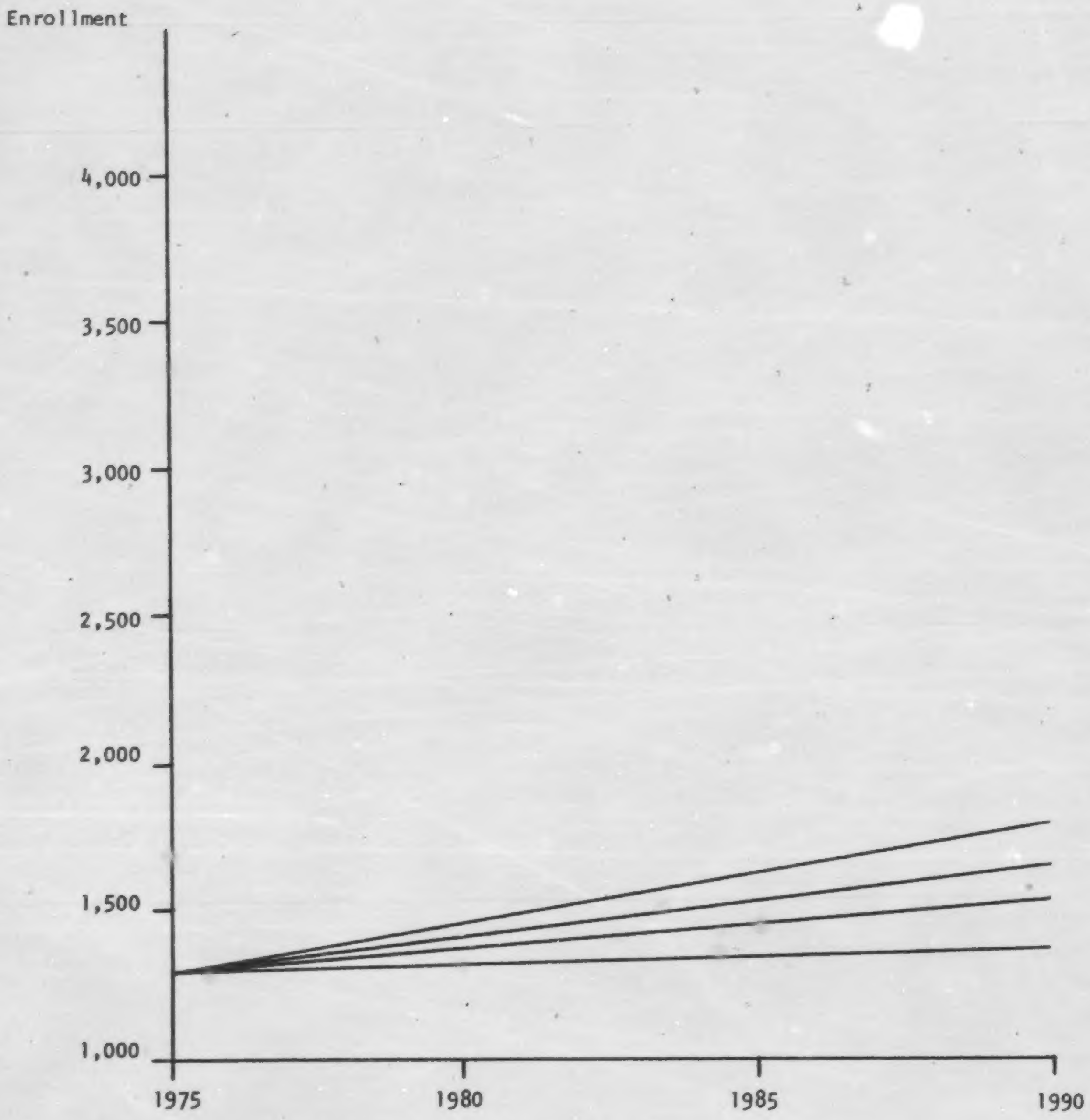


FIGURE V-11

ENROLLMENT PROJECTION-MEDIUM

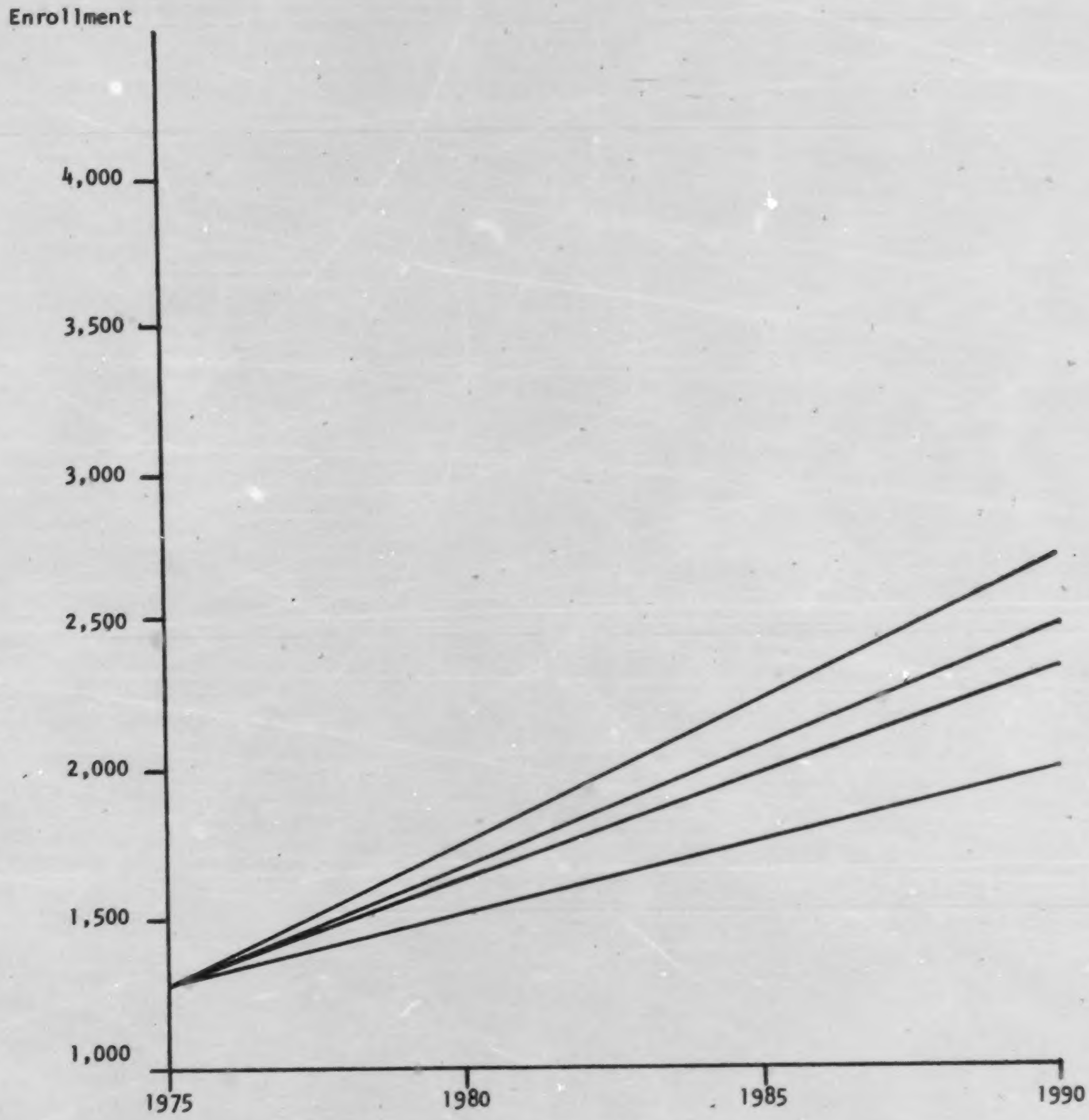
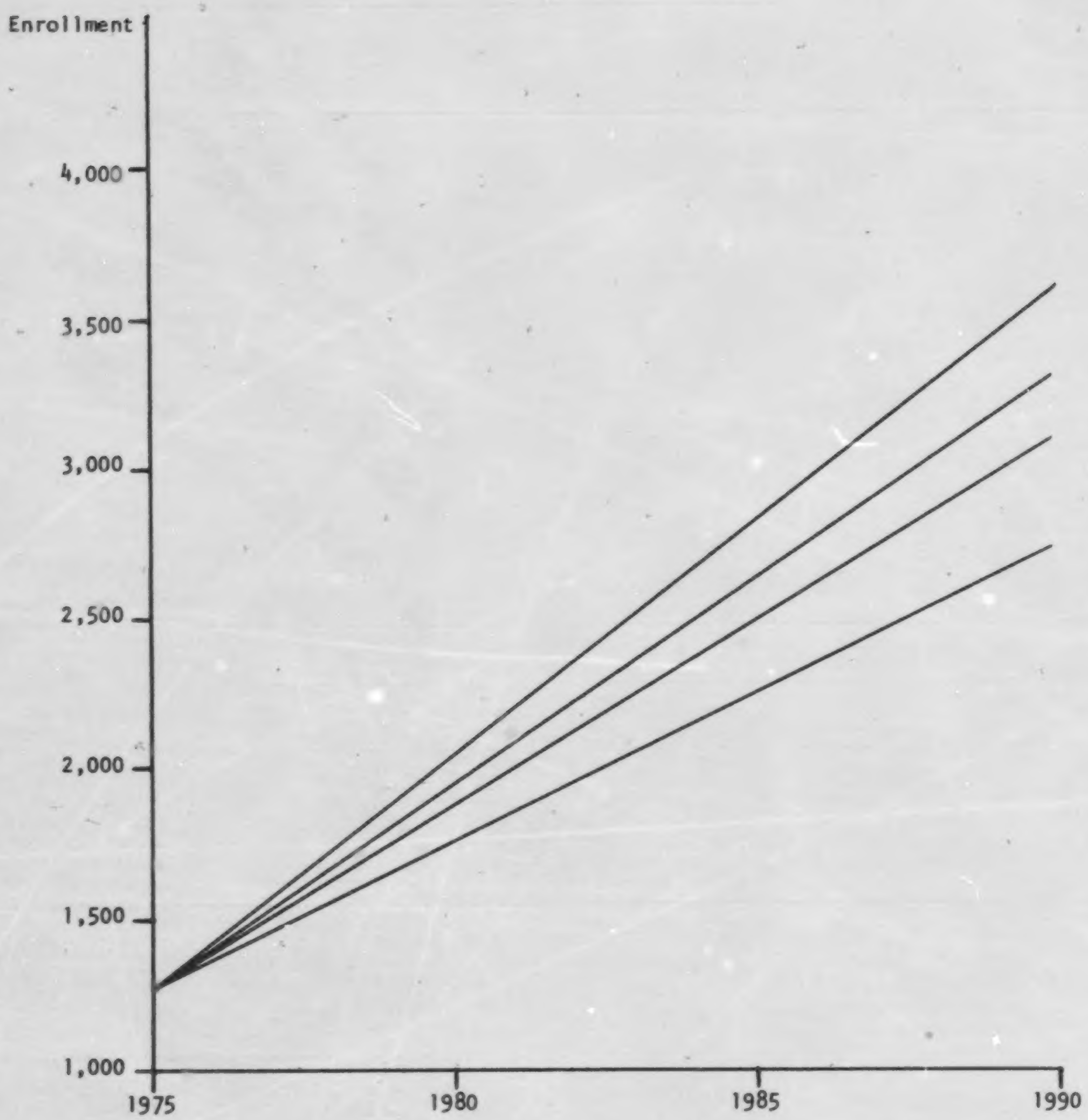


FIGURE V-12

ENROLLMENT PROJECTION-HIGH



CHAPTER VI

PROGRAMS TO MEET PEOPLE'S NEEDS

Postsecondary educational programs and services are being provided under a number of different auspices, although all are not equally known or recognized as doing so. By postsecondary educational programs, in the context of this report, is meant all forms of organized curriculums of study leading to collegiate academic degrees or other forms of specialized awards such as certificates or registration to practice, single courses or partial programs for which academic credit can be granted or which count toward specialized recognition, and both credit and non-credit courses offered to persons interested in their individual economic, civic, cultural, or personal improvement. In short, postsecondary education here is viewed as any and all education or training programs available to high school graduates or non-graduates who have progressed beyond the usual age of high-school attendence (18-19 years of age). So defined, postsecondary education in Cumberland County is provided at least in part not only by Cumberland County College, but also by the public school systems in the County, extension programs of Glassboro and Stockton State Colleges, the County Vocational Education Center, and several others. This chapter discusses the programs at Cumberland County College in relationship to others available in the County and all from the perspective of the needs of the area discussed in the last chapter of this report.

In the discussion to follow in this chapter attention should be directed to the strong and important relationships that current policies and modus operandi or programs and services offered by the College have with a number of the broad goals of the institution discussed in Chapter IV. As the contents of the chapter are read, seven of those broad goals especially should be kept in mind. They are Goal E (to maintain high academic quality), K (to optimize conditions for learning and teaching), G (to encourage and participate in developing a complete response to the postsecondary educational needs of the County), C (to respond to the continuing education of adult citizens), A (to develop the College as a cultural center for the County), M (to develop a flexible and creative structure and process for providing community college programs, including use of media, off-campus instruction, and so on), and I (to cooperate with CETA, the County Vocational Education Center, the local school systems, other colleges, and other organizations in providing postsecondary education in the County and region).

Current Programs at Cumberland County College and New Jersey County Colleges

Table VI-1 indicates Fall 1976 enrollments for the organized academic programs offered at Cumberland County College. Those programs in the top quartile of distribution of students enrolled for the full-time students include Liberal Arts, LA-Business, LA-Math/Science, Nursing, Accounting, and Community Service; the top quartile programs for the part-time students include Liberal Arts, LA-Business, Industrial Technology, Law Enforcement/Administration of Justice, and Accounting. These programs account for 60.6 percent of the full-time and 70.2 percent of the part-time student enrollment.

Combining in one list those programs that appear in the top quartile of percentage of enrollment in either full-time or part-time enrollment, it can be seen in Table VI-2, that these programs account for 71.2 percent

TABLE VI-1

Current Organized Offerings at Cumberland County College by Rank Order of Percentage of Full-Time and Part-Time Enrollment

FULL-TIME	%	RANK	PART-TIME	%	RANK
Liberal Arts	21.4	1	Liberal Arts	29.1	1
LA. Business	12.2	2	LA. Business	16.3	2
LA. Math/Sci	7.9	3	Indus. Tech	10.1	3
Nursing	7.9	3	Law/Justice	7.4	4
Accounting	5.7	4	Accounting	7.3	5
Comm. Service	5.5	5	Nursing	5.3	6
Elementary	5.1	6	Elementary	3.6	7
Indus. Tech.	4.8	7	Secretarial	2.9	8
Law/Justice	4.8	7	Marketing	2.7	9
LA, H & PE	3.9	8	LA. Math/Sci	2.7	9
Marketing	3.4	9	Early Child	2.3	10
Orn. Hort.	3.3	10	Comm. Service	2.1	11
Secretarial	2.6	11	Orn. Hort.	1.6	12
Legal Sec.	2.6	11	Legal Tech	1.6	12
Handicapped	2.5	12	Handicapped	1.5	13
Legal Tech.	2.3	13	Secondary	1.2	14
Career Ag.	1.6	14	Career Ag.	1.2	14
Secondary	1.4	15	La, H & PE	.5	15
Early Child	.9	16	Legal Sec	.4	16
TOTAL	99.8		TOTAL	99.8	

Source: Fall Enrollment 1976, Cumberland County College

TABLE VI-2

"Strongest" Enrolled Program Offerings at Cumberland County College

PROGRAM	% of F-T Enrollment	% of P-T Enrollment
Liberal Arts	21.4	29.1
LA, Business	12.2	16.3
LA, Math/Science	7.9	2.7
Nursing	7.9	5.3
Accounting	5.7	7.3
Comm. Service	5.5	2.1
Indus. Technology	4.8	10.1
Law/Justice	4.8	7.4
TOTAL	71.2	80.3

of the full-time enrollment and 80.3 percent of the part-time enrollment. These, then, are the "strongest" programs at the College in terms of attraction of students to enroll.

Surveying the 1974-75 list of programs offered at New Jersey Community Colleges, it can be seen that the following programs are unique to Cumberland County College: Handicapped Assistant and Industrial Technology. In addition, the College has some programs that are offered by only one other county college, these are: Physical Education & Recreation, Ornamental Horticulture, and Legal Technology. These programs, the percentage of Cumberland County College students enrolled in each, and the rank order of each on this measure are shown in Table VI-3.

The programs listed in Table VI-3 can also be considered as "strong" programs in terms of potential student attraction and should be viable to the continued growth of the College. Some further work is indicated, however, in the area of promotion of these programs in order for them to prove more valuable to the college's overall strength of program offerings.

Degrees

Based on the academic programs just described the College grants several types of associate degrees considered appropriate for successful completion of an organized collegiate two-year program.

The College offers the Associate in Arts (AA), a transfer degree, in the fields of Business Administration, Liberal Arts, Mathematics/ Science, Physical Education and Recreation, and Pre-Engineering.

Realizing the importance of allowing students to gain technical job skills, the College also offers the Associate in Applied Science

TABLE VI-3

Unique and Special Programs Offered by
Cumberland County College in New Jersey

PROGRAM	% of F-T Enrollment	Rank Order #*	% of P-T Enrollment	Rank Order in Enrollment
Handicapped Asst.	2.5	12	1.5	13
Industrial Tech	4.8	7	10.1	3
LA, H & PE	3.9	8	.5	15
Ornamental Hort.	3.3	10	1.6	12
Legal Tech	2.3	13	1.6	12
TOTAL	16.8		15.3	

*Out of a distribution of 16

Source: Educational Offerings at New Jersey Community Colleges 1974-1975, N.J. Office of Community College Programs Department of Higher Education.

(AAS) degree. The fields of study for this award reflect the varied interests of the population. Included are Accounting, Career Agriculture, Community Service, Data Processing, Drafting, Education as Early Childhood, Elementary Education, Secondary Education, Handicapped Program Assistant, Industrial Technology, Industrial Supervision and Management, Law Enforcement and Administration of Justice, Legal Secretarial, Legal Technology, Marketing, Nursing, Ornamental Horticulture, and Secretarial Science.[VI-1]

Certificates

Besides the associate degrees granted to graduates of two-year programs of study, the College offers one-year certificate programs in Education as Early Childhood, Elementary Education, Career Agriculture, Industrial Technology, Law Enforcement and Administration of Justice, Numerical Control Programming, and Secretarial Science.[VI-2]

Continuing Education, Non-credit, and Community Service Offerings

In addition to regularly scheduled courses, the College also offers "Continuing Education non-credit courses in response to the particular educational, occupational, and cultural needs of the people of Cumberland County."[VI-3] Examples of these kinds of educational services are medical and para-medical training (through programs in emergency medical training, industrial nursing, and nursing leadership), senior citizens programs (through courses such as "Palette Knife Painting"), and industrial management (through courses such as "The Occupational Safety and Health Act").

Limited Extension and Outreach Programs

In offering the array of academic programs described above, Cumberland County College displays the usual commitment to local comprehensive service usually made by public community colleges. Thus far, however, Cumberland County College has made its programs available in the conventional or traditional collegiate mode of instructional practices. By this is meant that the programs are almost totally campus based and presented through standard classroom and laboratory techniques--lectures, recitation, readings, reports, and formal written examination. Only a few and scattered instances of use are on record of more recently developed techniques of instruction designed to give students more options in the way and in the places of study that academic credit can be earned. Such instances include the offering of "a course by newspaper" and in a few courses offered "on-site" for local business and industries. One thrust of the current planning effort is aimed at starting at the College a more concentrated and positive examination of developing and adopting new practices to bring academic opportunity to citizens of Cumberland County in a wider range of ways.

Programs Under Study

Current investigations are being made into the possibility of offering the Associate in Arts and Sciences (AAS) degree in Aviation Maintenance, Marine Occupations, and Petroleum Technology.[VI-4] These programs appear justified by the new developments in the economy of Cumberland County discussed in Chapter IV.

Other Postsecondary Programs in Cumberland County

In order to avoid duplication of and possible competition among educational services, it is essential to understand the programs being offered at other institutions of postsecondary education within the County of Cumberland. The various institutions involved need to work cooperatively in order to conserve fiscal resources and insure proper delivery of educational services to those within the service area. Competition, in some cases, may be inevitable. However, in instances where cooperation could be made between, and among, institutions, the community will be better served.

Cumberland County Board of Vocational Education--Manpower Training Skills Center

The purpose of this center is "to provide vocational education for those who lack a skill, trade and experience."[VI-5] Open to all persons over the age of 18, the center is aimed at primarily attracting the disadvantaged. During the early 1970s the center offered skill programs in short-order cooking/institutional work, combination welding, arc-gas welding, auto body, building maintenance, auto service, machine shop, clerk general, secretarial, bookkeeping, drapery, and psychiatric aide. With an 80 percent placement average, this operation seems to be successful at serving its target population.

In addition to the Manpower Training Skills Center, the Board also offers migrant workers the opportunity to become familiar with all its job shops with the Spanish-speaking Vocational Education Program.[VI-6]

The Bridgeton Adult School

Offering many programs to the adults of Cumberland County, this school conducts evening courses in five major areas. These are (1) general education, (2) enrichment and enjoyment, (3) industrial, (4) business, and (5) community school activities.

The general education area includes Adult Basic Education (ABE), the high school equivalency (GED), Spanish, and English. Industrial and business areas of study include job/trade skill acquisition, typing, shorthand, and business machine operation.[VI-7]

The Adult School would seem to supply the needed services to those individuals in the County who, for whatever reasons, cannot attend such classes during the daytime hours.

The Vineland Senior High School - Adult Education Program

The purpose of this program is to offer elementary and secondary equivalency (Adult Basic Education and General Education Development), commercial/vocational/technical education, and nonacademic (leisure time) courses to the adult population of the County. Its enrollment figures are shown in Table VI-4 for the year ending June, 1970. This program, by offering courses which cut-cross many interest/need areas of local adults would seem to make a valuable contribution to the educational effort put forth by agencies within the County.[VI-8]

Glassboro State College

A multi-purpose college offering bachelor of arts and master of arts degrees this College at first glance does not seem to be in competition with Cumberland County College for students. Indeed, from the consultant team's inquiry into both state-level policy and plans and those at Glassboro State College itself, the intent is clearly to forestall such possible competition. It must be realized, however, that for some County residents, who could commute easily to Glassboro, Cumberland County College needs to show constantly why it would be advantageous to county residents to attend Cumberland County College for the first two years and then transfer to Glassboro or another upper-level college or university.

Glassboro is divided into four major academic divisions. They are: administrative studies, liberal arts and sciences, fine and performing arts, and professional studies.[VI-9]

TABLE VI-4

**Participation-Vineland High School Adult Education Program

COURSE TITLE	Total Class Enrollments	No. *Class Hours
Americanization Education	95	160
Adult Basic Education	175	200
Adult Migrant Project (summer)	350	50
Adult Migrant Project (winter)	102	750
Orientation to H.S. Equivalency Tests	85	2
G.E.D. Program	325	120
Algebra	26	180
Gregg Steno.	20	20
Bookkeeping	22	20
ABC Steno.	50	20
Typing	97	20
Quantity Food Preparation	17	25
Metal Stud Construction	55	80
Basic Carpentry	25	50
Air Cond. Seminar	125	4
Electronic Air Clean. Seminar	65	4
Vocational Guidance	65	12
Pre-vocational Training	8	40
Sub. Tea. Wksp.	35	20
Air Conditioning	60	90
Bas. Heat.	12	30
Oil Burner Rep.	10	30
Pow. Sewing	8	30
Blueprint Reading	66	30
Small Gas. Engine Repair	12	25
Auto. Trouble Shoot.	8	25
Custodial Training	8	20
Plumbing	30	30
English for State Troopers	22	20

* Total number of hours each class met during the entire year.
**CCPB, Jobs-Part I pp. 32,33.

Administrative studies is built from a liberal arts core from which further expertise is developed in management skills in public and private sectors of such areas as: accounting, advertising and broadcasting, economics, finance, industrial management, information processing, law and justice, personnel and labor relations, and marketing.[VI-10]

Fine and performing arts is also built from a liberal arts core from which further expertise is developed through studio specialization in such areas as: ceramics, jewelry/metalry, painting, printmaking, sculpture, textiles, puppetry, and design. In addition courses are available to enable certification as an art teacher in the State of New Jersey.[VI-11]

Also within the realm of fine and performing arts is the availability of pursuing programs in vocal or instrumental music, as well as speech and theatre. Music majors may also satisfy requirements for certification.

The division of professional studies, which is a teacher preparation program, offers concentration majors in:

- elementary-
    - early childhood
    - elementary
- health & phys. ed.
- home economics
- industrial ed and technology
- junior high/middle school-
    - language/soc. studies
    - math/science
- law/justice
- school nursing
- special ed. services;
    - handicapped
    - handicapped and industrial ed.
- teacher certification-
  (BA & following areas)
    - assoc. ed. media
    - foundations of ed
    - industrial arts
    - reading/speech corrections
    - speech correction
    - secondary
    - vocational education

In addition to the above programs, Glassboro offers specialization in drug information and education, educational administration, and math for elementary.[VI-12]

Glassboro also offers the opportunity for the student to concentrate his studies in one or more of the following areas in order to pursue individual interests and to integrate his studies:

- American studies
- anthropology
- aviation/aero-space
- behavioral sciences
- dance
- environmental studies
- expressive arts
- French
- German
- language
- personal growth
- philosophy/religion
- puppetry
- science & technology
- social & community services
- Spanish
- speech correction
- women's studies
- world studies

Stockton State College

Authorized in 1968 and beginning classes in 1971, Stockton State "is designed to provide a distinct alternative to other more traditional modes of undergraduate education through specialized programs in the arts, sciences, and professional studies."[VI-13] Highlighted by an aesthetically sound and functional campus, this College offers non-traditional routes to traditional subject matter through self-directed courses and independent study along with the traditional "major" approach.

The faculty, in the traditional sense, are the ones who are responsible for instructional programs. In addition to the Office of General Studies, the College offers programs through the Faculty of Arts and Humanities, the Faculty of Natural Sciences and Mathematics, the Faculty of Professional Studies, and the Faculty of Social and Behavioral Sciences.[VI-14]

The Office of General Studies offers the B.A. in Liberal Arts. Also included are many opportunities for the student to develop personal skills of a general nature, such as: Integration and Synthesis, Life-Skills, Self-Development, and others.

The Faculty of Arts and Humanities offers B.A. programs in the following areas:

*Studies in the Arts
Historical Studies
Philosophy and Religion
Literature and Language

The Faculty of Natural Sciences and Mathematics offers the B.S. or B.A. in the following areas:

*Biology
Chemistry
Environmental Studies
Marine Science
Mathematics
Applied Physics

In addition to the above areas, the Faculty also allows students to pursue Geoscience as a "supporting study"--one that is interdisciplinary within the Faculty.

The Faculty of Professional Studies, not a teacher preparation segment of the College, offers the following programs:

*Business Studies (B.A., B.S.)-
  accounting
  finance
  health care administration
  marketing
  public
Health Science
Information & Systems Sciences (B.A., B.S.)
Medical Communication Science (B.S.)
Nursing (B.S.N.)
Public Health (B.S.)
Speech Pathology - Audiology (B.S.)

The Faculty of Social & Behavioral Sciences offers the following programs:

*Criminal Justice (B.A.)
Economics (B.A.
Political Science (B.A.)
Psychology (B.A., B.S.)
Sociology & Anthropology (B.A.)
Social Work (B.S.)

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*All program information from Stockton State College, Bulletin 1976-78. p. 37.

In addition to the above programs, the Faculty offers the opportunity for students to obtain secondary school certification in social sciences, natural sciences, English, music, and art.

Thomas A. Edison College

A unique institution with no faculty of its own, and offering no direct instructional services, Edison's mission is to "develop flexible methods of evaluating college-level knowledge" and "to award valid college credits and degrees" to those who, for a variety of reasons, have not acquired their knowledge in a formal academic setting. An external degree granting institution, the "College exists to verify and to credential college-level learning, without regard to where or how that learning was acquired."[VI-15]

Enrolling its first student in 1972, the College now (1977) has had over 5,000 enrolled and has granted over 1,000 degrees.[VI-16] The College was recently accredited by Middle-States Association of Colleges and Secondary Schools. Consistent with the college's purpose, credits may be earned in any combination of the following three ways: transfer of credits from another institution; successful performance on College Level Examination Program (CLEP) tests; successful performance on an "Individual Assessment." In addition, credits may be earned for college-designed tests--the Thomas Edison College Examination Program (TECEP).[VI-17]

Edison College grants the B.A., the Bachelor of Science in Business Administration (B.S.B.A.), and the B.S. degree (in Human Services and Technical Services). The BSBA degree seems to be the most comprehensive, with specializations in Accounting, Finance, Marketing, Management of Human Resources, and Operations Management.[VI-18]

The College also grants the Associate degree that most emphasizes the student's previous experiences and future goals. These are the Associate in Arts (A.A.), the Associate in Science in Management (A.S.M.), and the Associate in Applied Science in Radiologic Technology (AASRT) degrees.[VI-19]

Some Special Implications for Planning

When Cumberland County College's program offerings and current academic practices are viewed along with the other postsecondary educational offerings in the County, a number of special implications for planning become evident. They are (1) the need for a modification of current practices to reach the College's county constituency more completely, (2) the possibilities of doing so also to reach beyond the County to other areas in Southern New Jersey, (3) the fiscal incentives students have in commuting, and (4) the critical role of faculty and staff in these efforts.

Several facts support a conclusion that the College should look seriously at ways it can extend its reach not only throughout the County but somewhat beyond, particularly to Salem County. The needs for broader coverage of the County were amplified in Chapter V. That the College hold potential for more services beyond the County to Southern New Jersey and Salem County is indicated by the facts that charge-backs now come principally from this area and that Cumberland has already been identified as providing a regional service in maintaining certain programs; in this regard, the College has further opportunity to expand the programs listed as unique earlier in this chapter, and it should move to do so.

The tuition and fee structures of the several colleges in the region establish different incentives to students to commute to Cumberland or elsewhere. At Glassboro and Stockton, basic tuition to an in-State resident student is $22 per student credit hour; this is only a bit higher than Cumberland's ($19.50 for an in-County resident) but the latter's tuition for an out-of-County resident is $40.00 a credit hour, almost twice the charge at the state colleges. Residents of nearby counties will assuredly be influenced by this cost differential.

Faculty acceptance and cooperative support of policies to extend the reach of the College's programs and services is critical to success of any attempts in such a direction. To assure this essential support, the need for the new directions must be seen throughout institution, but beyond this, faculty will require new forms of support to enable them to implement the new policy directions. This will entail such things as in-service workshops to promote awareness and to improve practices in developmental studies, adult learning, and use of new technological aids in instruction. It will also require cooperative development within the College of some new policy statements. One that will be needed for example; if the College moves to establish on-site instructional services at places of business, industry, and government, is a policy on faculty role in such services. The usual practice of institutions seeking to implement a community-based educational posture is to expect off-campus, on-site services that are within the recognized mission of the institution to be a part of the regular duty of faculty and, therefore, given weight in considerations of work load, renumeration, retention, promotion and tenure. Services outside of the academic mission of the institution are viewed as professional concerns of the individual faculty member.

were fifteen major career cluster areas encompassed with some one hundred twenty-six job families provided for respondent use.

By using occupational clusters as the framework for program planning at Cumberland County College, the faculty and administration can inter-relate its career guidance and counseling program with its educational offerings. Furthermore, faculties can readily see the potential for inter-departmental offerings which afford many more career options for students without additional staffing or resource costs.

The occupational clusters can be subdivided into job families and then further reduced to various potential specific jobs or occupational areas falling into each of the family categories.

An Analysis of Fifteen Occupational Clusters Identified by the U.S. Office of Education, a study prepared by the Grayson County College in Texas provides such a breakdown and is recommended for consideration by the administration and faculty at Cumberland County College.

Evaluation of Ongoing Programs

The occupational cluster planning framework enables the College to maintain an ongoing evaluation of its present offerings. For example, as reported in Table VI-1 the three lowest program offerings by rank order of percentage of full-time students were Career Agriculture, Secondary Education, and Early Childhood Education. Career Agriculture was also among the three lowest for part-time enrollment. At first glance, therefore, it might appear that Career Agriculture cannot be justified because of high cost and low productivity. By examining the occupational cluster of agribusiness and natural resources as developed by Grayson County College, it soon becomes apparent that a wide range of additional job families could be offered through very slight combinations of inter-departmental offerings or by making students aware of the range of occupations which may accrue from such a program. Early Childhood Education, which ranked 16th for full-time enrollment (see Table VI-1) ranked 10th for part-time enrollment and thus may be responding to a student clientele quite different from that represented among full-time students. The proposed Office of Planning and Research for Cumberland County College might want to investigate the needs and aspirations of the part-time clientele enrolled in the Early Childhood Education program in order to determine whether a larger market is available if the faculty becomes aware of the interests, needs, and aspirations of the clientele.

New Programs

As observed earlier, at least three new programs are under consideration by the College including Aviation Maintenance, Marine Occupations, and Petroleum Technology. These offerings would encompass two new occupational clusters represented by the program offerings of Cumberland County College. Presently, the college's twenty-three program fall under nine of the fifteen occupational clusters. By examining these clusters, it becomes apparent that the College could offer some new programs with very slight modifications of existing courses or programming. Examples can be seen in the analysis made of Cumberland County College programs in relation to the Boys Scout Youth Interest Survey as reported in Tables V-16 and V-17. The career interests of the respondents in architectural drafting, small business operation, licensed practical nursing, fish and game management, and social work represent career fields which the College could easily serve with very slight modifications of ongoing programs.

The consultant team cautions against the proliferation of numerous new programs and courses merely for the sake of adding more offerings. This can be detrimental to the institution through high costs and poor use of resources. It is possible, however, for the College to maintain an ongoing analysis of the most productive programs and maintaining dynamic educational services through program design, refinement, and ongoing assessment.

Concept of Brokering

Programming of the College can further be enhanced by exploring the opportunity for brokering by Cumberland County College among the postsecondary institutions in its service area. As observed earlier, Glassboro State College and Stockton State College both offer traditional and non-traditional programs at the baccalaureate level. Recognition of specific courses as part of a program of studies at Cumberland County College could further enhance the occupational offerings of the community college. In a number of cases, specialized courses offered at the state colleges and accepted as transfer credit by the community college could enable a student to pursue an Associate Degree track with no additional cost to the community college. The consultant team suggest that a faculty committee examine the fifteen occupational clusters against the program offerings of the state colleges to see those which would by most appropriate for Cumberland County College.

Conclusions: Gaps and Overlaps

Except for some highly expensive or esoteric programs at advanced levels of academic study, such as medicine or a Ph.D., a full range of opportunity for postsecondary study appears available now to citizens in Cumberland County. This is made more positive by the development of Edison College although it should be remembered that its type of service is limited in different ways.

The challenge before public and educational policy makers in Cumberland County, and indeed in Southern New Jersey, then, is not how to get more auspices by which postsecondary educational programs and services will be provided but, rather, it is how best to get maximum use of the offerings that existing auspices can provide. There is need for some form of mechanism to insure greater communication among the schools, colleges, and anxillary educational interests in Cumberland County; in this respect Cumberland County College has a striking opportunity to assume the role of a brokering agent that will be to the advantage of all concerned--the schools, colleges, others involved in education and training in the area directly or indirectly--but most importantly to the public that needs to be served.

CHAPTER VII

THE SETTING FOR PLANNING IN 1977-1990

Planning as a process occurs in a context of circumstances that reach beyond the institution about which the planning function is concerned. To be effective, therefore, the process must include techniques for making the larger context of interests and forces bearing on the College clearly understood and for assuring that both the external and the internal realities are consciously considered as the plan for the institution is developed and actions to implement it are taken.

Complex of Interest in Cumberland County College

Cumberland County College is sponsored by the Cumberland County Board of Chosen Freeholders, who in turn appoint the nine-member Board of Trustees for the College. The College was established in 1963 by authority of Title 18A of the Revised Education Law of the State of New Jersey. It operates as a publicly supported comprehensive two-year institution under the jurisdiction of the New Jersey State Board of Higher Education and the New Jersey Department of Higher Education. At the state level, policy decisions affecting the College are most likely to originate in the offices of the Director of Community College Programs, the Commissioner, or the Chancellor. Policy decisions also may come from actions of other agencies in the executive or legislative branches of New Jersey state government.

At the county level the Board of Chosen Freeholders is assisted by a County Planning Board and planning staff. Each of the three population centers of Bridgeton, Vineland and Millville has a mayor and city council or city commission, as well as its own Planning Board and Zoning Board of Adjustment and several additional city officials.

The business communities in each of these three areas also have Chambers of Commerce. The members express an active interest in the College collectively as well as individually.

Throughout the County are other organizations and agencies established for purposes such as education, health and social services. Through their policies and procedures they too represent factors in the complex of interests in which planning for the College takes place.

Members of the consultant team met with a cross section of community leaders in the course of assisting the College in its planning efforts. Interviews were conducted with representatives of the Chambers of Commerce, the Board of Chosen Freeholders, CETA, the Vocational-Technical School, the secondary schools, a nearby college, the local governments, the County Planning Board, the Economic Development Office, and others. Interviews and informal discussions took place at the College with faculty, administrators, students, supporting staff, and members of the Board of Trustees. The members of the Master Plan Committee, listed in Appendix A, were particularly helpful in this effort to understand the College and its community.

The technique used in the interviews was a standard one aimed at essentially three things: (1) getting from the community leader his insight and observations about the public image held of Cumberland County College, (2) drawing reactions to several broad goals of the

College to which it may wish to give special attention during the next 5-10 years, and (3) soliciting suggestions as to how the external forces that would be involved in the college's moves toward established goals during the decade ahead could be managed to support the College as fully as possible. To start discussion related to the last thrust mentioned, the interviewee was told of college goals E,O,K,G,C,A,M, and I (See Appendix B) as possible strong concerns of the College during the 80s.

An image of the College, along with community views about its goals and the forces which may help to hinder their accomplishment emerged from these discussions. The results will now be presented, concluding with some options and recommendations.

Current Image of Cumberland County College

The image of this College in the eyes of its community is so positive that it took the team a while to realize that continuing to probe was not going to produce any faction in the community with a negative viewpoint. That is not to imply that there were no suggestions for improvement, but statements like the following occurred throughout the consultant team's interviews: "enjoys a fantastic relationship," "great acceptance," "cohesive rapport with politicians, educators, community at large," and "changed attitude of people toward education."

Several respondents traced the matter historically, saying that when the College was established there were indeed some doubters, but that the record of the institution has been so good that their concerns were allayed long ago.

Those in a number of role positions must take credit for this image. Most visible have been the students, who went on to perform with distinction in further education and in jobs for which they were prepared. The faculty carried out their teaching and counseling functions with a full measure of skill and creativity, with obvious caring about students as individuals. In addition a number of them over the years have been active in local organizations. The Board of Chosen Freeholders has chosen wisely the Boards of Trustees, who have provided policy guidance for the College. In turn the trustees have chosen presidents and top staff who exhibit a leadership style which reflects the values and dreams but also the fiscal realities of the community their college serves. All of these people together, and many more, are responsible for the very positive image of the College which was mentioned repeatedly to members of the consultant team.

Planning for the next five to ten years thus begins from a position of considerable strength as a result of this community image of the College. Of course, to settle for current practice since the results have been so good is one hazard of such a reputation.

Discussion of the setting for planning will continue, first with a look at some positive and negative forces which may help or hinder the College as a whole, and second with attention to some forces which may affect the accomplishment of specific goals of the College.

Some Forces Which May Help or Hinder the College

Economic circumstances over which the community has limited control may well be the most important force helping or hindering the College in the achievement of its goals in the near future. Although the unemployment rate is still high, there is some indication that the economic problems faced by Southern New Jersey may have reached bottom in the summer of 1977. During the September visit of the consultant team several reports were received of new industry or business coming into the area. Secondary growth opportunities also were expected as a result of gambling casinos coming into the Atlantic City area, and the possibility of off-shore oil drilling. Other developments noted as favorable were the growth of the ports of Philadelphia and Camden, the establishment of the 200 mile fishing limit for foreign vessels, and the interest in the area shown by representatives of firms in the frozen food, meat packing and recycling industries.

Some of the new-found attractiveness of the Southern New Jersey setting may reflect problems in other parts of the country. For example, the return of some of the food processing industry in part may be traced to the lack of water in California. Persisting hurdles in attracting industry to the area still include environmental protection laws, unionization, energy requirements, the tax structure, and old plants. On the other hand, some of the area to which industry fled from the northeast no longer have substantial advantages along these dimensions.

The work ethic--or rather the lack of it--among young people sought by industry was mentioned in most conversations with business leaders. A pool of workers who will perform "a day's work for a day's pay" was viewed as a prerequisite to attracting industry into the area. Business leaders appeared depressed about the prospects, expressing also the opinion that unemployment benefits are in competition with net industrial wages.

The acceptance of Cumberland County College as a feeder institution for nearby transfer institutions is a positive force in helping the

College achieve its goals. Respondents in a number of the interviews reported examples of excellent preparation at the College for the students' later academic work. In some cases counselors in the high school or at the transfer colleges were said to have advised taking the first two years at Cumberland rather than at the transfer institution.

The widespread support for the College among community leaders has already been mentioned as a strong positive force which will be an important resource for the College in accomplishing its goals. The point was made, however, that in order to take advantage of this resource the College will have to take the initiative, rather than waiting for it to come from the community. Related to this point, one respondent talked about a "lack of dynamic, a parochialism, a conservatism" in the County which might be viewed as a negative force in carrying out some of the college's goals.

The extent to which college faculty are a part of the community was noted by a number of those interviewed. This undoubtedly is a factor in the positive support expressed for the College by community leaders. The faculty themselves, of course, are a crucial force in moving the College toward achievement of its purposes. Their full involvement is essential in the development and implementation of operating unit objectives by which specific goals of the College will be achieved.

Views on Cumberland County College's Goals

In Chapter III the development of broad goals for the College was discussed; these goals were grouped in terms of their importance (Group I), and those college goals showing a higher level of aspiration than of achievement to date (Group II). These two lists of goals may be found in Chapter III. Our task will be to examine the positive and negative forces apparent in the community which may help or hinder the College in its accomplishment of goals falling into these two categories.

Group I - Goals Judged to be the Most Important

Goal E--to maintain high standards of academic quality. It is interesting to note that this goal was in top place with respect to both aspiration and achievement. Further, the view of those at the College that this is the most completely achieved of all the stated goals was borne out by the interviews conducted with a variety of townspeople. As a result of these two circumstances, it is likely that an important force in continuing to achieve this top-rated goal will be the expectation pattern that is shared by students, faculty, community members and those at neighboring colleges. Another positive force is the alertness of college decisionmakers in meeting the challenge of situations which might endanger continued achievement of this goal. For example, with the influx of Spanish-speaking students the College already has implemented a special admissions procedure and remediation opportunities for those among this group who might find difficult the transition to English-speaking college level work.

Goal O--to augment the New Jersey Statutory Funding Procedure with federal, foundation and other private funding. This goal ranked next to the top in terms of aspiration at Cumberland County College, but roughly two-thirds of the goals were judged to have a higher level of accomplishment than this goal.

Aside from operating funds, the two principal purposes for which substantial additional funds might be sought in the near future would be general plan expansion to handle increased enrollment, and the addition of a cultural center for both the College and the County.

Most of the forces having potential impact on the achievement of this goal appear to be negative. For example, the state of New Jersey is not encouraging capital funding, and there is a five percent cap on any increase in the county's budget for education. A member of the Board of Chosen Freeholders indicated that there was slight possibility of amending this cap, and added his opinion that more of the financial burden of their education should be carried by the students. No respondents were optimistic about raising money for college capital purposes from foundations.

An attempt is underway at the College to obtain federal funding for specific projects through a Title III grant. In general, such public funds available are for targeted groups. One person interviewed ventured the opinion that prospects for obtaining federal dollars are not good unless expenditure of funds received will result in keeping youth out of the labor force. Considering the level of support for the College in general, and for a cultural center in particular, it is possible that some of the money for such a project might be raised by community subscription, especially if the several cultural groups throughout the County were to unite in this effort.

Reactions to the idea of raising additional funds for the College was favorable on the part of all persons interviewed, provided this would not mean an additional tax burden. This acceptance could mean leadership support for creative approaches to new funding. The pressure of additional enrollment could be handled either by further building on the campus or by the use of decentralized locations throughout the County. If the policy decision on this matter were in the direction of campus expansion, this decision could become a positive force for the goal of seeking augmented funding for the College.

Goal K--to provide optimum conditions for learning and teaching, including quality of personnel, instructional resources, physical plan, etc. This goal was in third position among the fifteen goals identified for Cumberland College, but was judged to be accomplished at approximately the same level. A positive force in maintaining this goal achievement will be the current market conditions related to supply of and demand for college teachers.

A positive force toward maintaining optimum conditions in terms of needed physical plant may be increasing enrollment pressure. As developed in Chapter IV, a conclusion reached in this planning effort is that the College is virtually certain to continue its growth for the period under study. If this pressure continues to grow, and there are no funds for campus expansion, efforts to maintain optimum learning conditions may result in a decision to take some of the college operations away from the main campus. As indicated by the data and discussion in Chapters V and VIII, there is justification for both completion of the current capital development plan of the College and the development of one or more off-campus centers for instruction, if a full response to local needs is provided.

Goal G-to develop a complete response to postsecondary educational needs; to offer the services of a comprehensive community college. This goal ranks high at the College, but it is currently achieved at an even higher level. In other words, in the opinion of the members of the Master Plan Committee who did the rating in terms of aspiration and achievement, Cumberland County College is already comprehensive in its offerings and services. A respondent from one of the higher education institutions nearby encouraged the College to become more comprehensive by offering more AAS programs rather than those with AA or AS degrees. He believes that the College does not offer enough associate in applied science programs to meet the needs, for example, of Vineland State School, nor for the upgrading of personnel in industry and in other Cumberland County institutions. In his opinion, although the response of the College to community needs has been good generally, community outreach programs are not yet provided to the extent that such services are available through some other county colleges in the State. Provided such needs can be documented, and that funds are available to offer these services, these conditions may constitute positive forces toward accomplishment of the goal of comprehensiveness.

Goal C--to meet the continuing needs for post-high school education and training expressed by adult citizens. Across the country the provision of adult education is destined to be a highly competitive endeavor as enrollments of traditional types continue to decrease. The situation in Cumberland County is no exception. On the one hand statements like "people are starved for adult education," and "you have to call immediately when a non-credit course is announced or you can't get in" were heard, indicating a positive force in the college's efforts to carry out this goal. On the other hand, statements like "everybody is now pushing for the adult education market," and "all sorts are getting into the act" indicated competition from other institutions and organizations that together may constitute a negative force in attempts to carry out this goal.

At this time there seems to be an informal and probably fragile arrangement for division of the adult education market among local educational groups such as the College, the area vocational-technical school, the secondary schools, nearby four-year schools and CETA. Such a cooperative arrangement can be viewed as a help to the College in carrying out this goal, or as a hindrance insofar as the College may wish to expand its portion of the adult education market.

CETA is able to exercise power in adult education arrangements because of funding which follows the students it contracts to train. For example, CETA was instrumental in removing a program from the vocational-technical school by supporting this program in the College. The local development office also depends on CETA to produce trained adults who will be effective employees for the industries attracted to the area. Understandably, in terms of its mission, CETA favors training which is outcome-oriented, and uses this as a central criterion in the selection of training facilities for its clients.

The potential for "education in industry" in Cumberland County is beginning to be recognized; this is a kind of short-term outreach which faculty in the technical and semi-professional fields may wish to explore. For example, providing for training foremen at the job site, and through them helping to reach the problem mentioned earlier of a lack of "work ethic" is one illustration of this potential for service.

The county library has initiated a program to serve the Spanish-speaking agricultural workers. The program is taken to them, and begins with athletics and music prior to the introduction of books. A spokesman at the library indicated they would like to cooperate with the College in extending opportunities to these adults. Organizations for minority groups exist in Bridgeton and Vineland, and many constitute vehicles through which the College could work to serve minority adults.

Many of them, however, lack a high school education. For example, one respondent stated that in Vineland alone there are 6000 adults without a high school diploma. The Vineland Times Journal frequently runs a full-page ad about the GED program, and a substantial number of adults take advantage of this newspaper-based program.

To date the College has been successful in staving off attempts by other postsecondary institutions to offer work at the freshman and sophomore levels. The coordination of programs offered by different types of colleges is a problem found in most states; it is usually made a responsibility of a state agency, and this is true in New Jersey. The State Department of Higher Education is strengthening its policies and monitoring processes concerning it. Within those guidelines, the College welcomes the provision of academic services above the lower-division level for county residents. Cooperative arrangements with Edison College, the New Jersey institution established to provide examining, assessing and credentialing services but not instruction, may be a positive force in helping the College meet its goal of providing cooperatively with other postsecondary agencies a complete span of educational services for the county's adults.

Goal A--to develop into a cultural center for Cumberland County. Recognition that the County needs a cultural center appears to be widespread. There is a county cultural society which was initiated during the bicentennial period, and several of the local communities have performing arts groups. Orchestrating the various splinter groups for support for a cultural center at the College will be necessary in order to capitalize on the positive force they and their leaders can exert in helping the College achieve this goal. "Consciousness-raising" with regard to the need for a cultural center was suggested by one respondent, in order to achieve mass support for such a project.

A question was raised by a community leader as to whether the campus is large enough to include a cultural center, although he added that the College was located centrally and was the logical place for such an undertaking. With an outdoor amphitheater as part of the complex, some New Jersey "Greenacres" funds might become available. On the other hand, the use of these funds might result in the center's being located elsewhere in the County, in that sense becoming a negative force in the development of the cultural center at the College.

Financing is the big question, although there is not unanimous opinion that the County is ready for "real performing arts." Management of such a center, including programming appropriate for the clientele, was noted as a crucial factor in its potential success. Mention was made of raising some of the funds by subscription, and some from wealth donors, as approaches which would encourage the Freeholders in their support, and perhaps outside donors.

Goal M--to develop a flexible structure to meet postsecondary educational needs, including use of new media, off-campus learning centers, cooperative college and community resource utilization, open learning systems, etc. At least three issues are involved in this goal: the mode of learning, the location of instruction, and financial arrangements. With respect to mode of learning, a CETA representative stated that the College needs more flexibility and adaptation in its programs, adding that "all is taught in two year blocks and there are no self-paced modular services." He also said that CETA clients need in and out registration and instruction. He included the vocational-technical school when he said that the school and the community college "are vying for the same market and are using the same over-formalized instructional modes."

When the question of meeting educational needs beyond the college campus was discussed with members of the Board of Chosen Freeholders they expressed the concern that this could erode the "solidarity, image, atmosphere--productive atmosphere" that are essential to a college. The question of open enrollment may become entangled in the question of location to handle additional students; in the same conversation the Freeholder said the College ought periodically to review its open enrollment to ensure that the College is not "spewing out" poor students.

It is possible that a double-barreled effort--meeting enrollment pressures through college offerings both on the campus and in other locations--might have the most support from the decision-makers at the College and in the community.

Learning on the job through internship arrangements is a type of program for which there appears to be support in the industrial community, and possibly federal dollars as well, both potentially positive forces. A Philadelphia university which has sponsored a number of these internships in the Cumberland area is in the process of scaling down or terminating these arrangements. This may open some opportunities for Cumberland County College students provided the internships can accommodate freshman and sophomore level students.

Transportation may become a force in the decisions about offering some programs closer to the homes of students. It is true that the campus is centrally located, but there is no public transportation. Should energy again become scarce this could present a problem.

Finally, some adults who would profit by community college educational opportunities may find other media, other locations more conducive to learning than a college campus symbolizing a culture which is not well understood or accepted.

Goal I--to work in close cooperation with the County Vocational-Technical Center, the CETA Manpower Office and the local school systems to maximize educational opportunities and to avoid needless duplication. Cooperation among these organizations at present appears to be in a state of tenuous equilibrium. This equilibrium is based on relative political power both locally and at the state level, and on the availability of resources needed to carry out the purposes of the respective organizations. A shift in either the political climate or available resources could change the situation from one of cooperation to competition since the adult learner is a client sought by each of these groups. This would lead to duplication of effort and overlapping use of scarce resources, which in turn would probably bring about a new political solution, beginning again the cycle of equilibrium-disequilibrium.

Although the community is the locus for these attempts at coordination, the forces that bear on the situation are also at the state and national levels. General CETA policy comes from the federal and state levels, as do the guidelines for distribution of funds to area vocational-technical schools and to community colleges.

Communication among the College, secondary schools, CETA and the vocational-technical school appears to be working well at the top levels, and thus constitutes a positive force for the accomplishment of this college goal. The secondary school-college cooperation appears to include productive relations between the teachers and counselors on both sides.

Basic to coordination of the activities of these four types of educational organizations in the future will be a plan for decision-making, that is, "role and scope" guidelines for the set of Cumberland County organizations. Without such guidelines, every problem will require an ad hoc decision, endangering each time the fragile equilibrium which now esists. Although the College can exert a leadership role in working toward such guidelines, ultimately this would seem to be a role for the Board of Chosen Freeholders, the highest and most powerful policy-making body in the County.

CHAPTER VIII

PLANS CALL FOR RESOURCES

That the axiom expressed in the title of this last chapter is well known and recognized by the college planning committee is evident in that broad goal 0 (to augment the current sources and procedures for providing fiscal support to the College) was placed among the highest of the fifteen considered in Chapter IV. Simple economic realism dictates the conclusion that unless Cumberland County College is successful in efforts to get the money it needs to develop programs and services and to acquire personnel, physical plant and equipment, and related resources necessary to carry on and to manage them, none of the broad goals or operating objectives will be reached. This is so, no matter how important or valued the purposes may be.

A review of the preceding contents of this report leads to the broad general conclusions that the programs and services Cumberland County College provided are needed in the County and region and that these needs can be expected to increase in the decade ahead. It follows logically from these conclusions that the fiscal, personnel, and physical resources the College needs to accomplish its broad mission and related specific activities will also increase. Therefore, as this chapter is read, the readers should keep in mind that the basic issue is whether or not the full scope of needs for postsecondary educational programs and services are to be provided in the County for its citizens, economy, and general welfare. If needed resources are forthcoming, programs and services will be sustained and provided as necessary; if not the only choices will be in a direction of program curtailment--with a consequent reduction of opportunity and quality of life in the locality the College serves.

Agencies and interests at the state level are devoting considerable attention to the subject of financing county colleges. As yet, however, the full impact of the results emerging from the attention being given the topic are not clear. An intensive analysis of county college financing, for example, was recently produced by the Commission on Financing Postsecondary Education. The Commission developed a number of models whereby its major proposition, namely, that state funding of county colleges should equalize public funding of those institutions on the basis of county taxing ability.[VIII-1] Depending on the model chosen and the actual approaches to implementation used, different impacts on individual county colleges will result. Cumberland County College is well advised to hold to its current stance, in cooperation with the others in the State, of maintaining a close watch on actions at the state level.

The basic development of a community college program is dependent upon the variety of resources available to the College. Future planning must include an analysis of the past use as well as the future allocation of resources in order to implement the total plan. Resources for the College may be separated into two categories for analysis: those assigned to support the current operations of the College and those assigned to provide support for capital expenditures.

Current Operating Funds

Resources for support of the current operation of the educational services of Cumberland County College come from five major sources:

1. Tax support from state government (state aid) allocated from legislative appropriations which provide $700 per FTE in credit courses plus FTE in certain approved non-credit courses.

   The basis for this FTE is a state approved or negotiated figure which is usually not as large as the actual total of students served.

2. Tax support from county government (county appropriations) based upon the approved college budget.

   This is also a negotiated amount, agreed to by the county officials in discussion with college officials. Often the pressure is to make up the gap between income from other sources and the budget total.

3. Tuition and fees, including funds paid by students themselves plus "charge-back" funds paid by other counties for students attending special programs.

   The Board of Higher Education has authorized a ceiling on full-time tuition at $500 per year. Cumberland County College currently charges $460 for in-county residents and $960 ($480 per semester) for out-of-county residents. Charge-back to counties for those students who have a certificate of eligibility for charge-back assistance is $480 per semester. An out-of-state resident is charged $1,660 per year (two semesters of $830 each). Part-time students pay $19.50 per semester credit hour if they are county residents, $40 per semester hour if they are out-of-county residents, and $69 per semester hour if they are from outside the State.

4. Gifts and grants including categorical aid from state, federal or other sources for special programs.

   Thus far this has been a very minor source of revenue for Cumberland County College. This part of New Jersey is not a wealthy area where one can expect large gifts from local citizens. The College thus far has not stressed federal grantmanship to any extent either.

5. Other current revenue including interest from investments. Income for operation of auxillary enterprises such as the food services, bookstore, athletics, etc. comes from county allocations as well as from current income.

> The auxiliary enterprises have maintained a well balanced operation in terms of income vis-a-vis expenditures.

The total Educational and General (E & G) expenditures for FY 1975-76 was $2,088,722 which was listed as coming from revenue from four sources: $681,000 from state aid, $675,581 from county aid, $752,833 from tuition, and $61,369 from other sources. These expenditures equaled $1,380 per student.

Cumberland County College received more support percentage-wise from the state aid (31%) and tuition and fees (35%) and less from county sources (31%) than the state average figures for the 18 county colleges (28%, 29%, 35% respectively) as of FY 1975-76. This institution, however, has one of the lowest expenditures per full-time equivalent student (FTE) of the various colleges in New Jersey. This low level has been a consistent pattern over a number of documented years.

There are several factors which affect the expenditures both total and per unit (FTE). A brief examination of these provides a basis for analyzing and planning:

Program Costs. More and more often colleges recently have acted to provide cost information related to programs. Such figures are valuable in providing an opportunity to arrive at realistic decisions regarding relationships between programs and costs per student. If carried out in all institutions such cost information would enable state support allocations to be related to costs in a direct way. Such a procedure would produce more state support for colleges which have the more expensive programs in a relationship which is equitable to each and fair to all. A more nearly direct relationship between actual costs and actual resources would then be possible.

For example, in 1975-76 Cumberland County College spent an average per FTE in the transfer programs of $1,227 and per FTE in the technical programs of $1,795. In the transfer programs these costs ranged from a low of $1,095/FTE math and science liberal arts to a high of $1,587/FTE in physical education liberal arts. In the technical program the range was greater: from $1,301/FTE in law enforcement to $3,099/FTE in nursing. The state allocation is currently $700/FTE ($600 at that time) for each of these without regard to actual costs. This means that other sources, local, cetegorical, etc. must provide for the wide variations in actual costs.

While a number of factors affect program costs, the major influence upon cost results from the faculty/student ratio and the faculty salary costs. The portion of the total cost created by faculty salaries ranged on the average from a low of 45.3 percent to a high of 74.4 percent of total costs in various programs. More expensive programs often also have the lowest faculty/student ratios and at times the highest faculty salary level.

Students to be served. The projections of potential students who should be served clearly indicates that there is not to be expected a large increase from the currently identified sources of students. Demographic information relative to the currently enrolled students shows that the college enrollment represents 1.0 percent of the total population in Cumberland County. This may be compared with a national average of two percent for many community colleges although a few colleges serve as much as ten percent of the total population each year. Unless Cumberland County College increases the percentage of the total county population, much of the expected increases in enrollment made in Chapter V will not materialize.

State policy. There are several areas of state planning and policy which affect resource allocation. These are, in addition to the decisions relating to the basis for allocating FTE funds, such areas as: assigned geographic districts (if all or a portion of another county were assigned to Cumberland County College, a new cost factor would be introduced); regionalization of selected high cost programs (if Cumberland County College were assigned responsibility for one or more special programs, these students would have to attend Cumberland County College and adjustments in state support as well as chargeback would be necessary); recognition of wider spectrum, of non-credit courses (the current state policy of limitations upon non-credit offerings forces colleges to either abandon some offerings or make them completely self-supporting); state emphasis or approval of other state supported collegiate institutions and/or technical schools (if the State encourages other postsecondary educational institutions within the same area to expand their programs or to establish duplicating programs, the dispersion of effort will increase costs for each institution); state limitations on number of students to be supported (state policy to use their own projected enrollments as a basis for state allocations even though actual enrollment may be in excess of this number causes state level of support to be dissipated even more); and availability of support for capital outlay (states ordinarily support capital projects at 50 percent of cost, but recently funds have not been available, thereby limiting special expansion in some areas).

Inflation. Since inflation is a factor which takes resources away from the College without providing any reasonable substitution, it is obvious that unless correction is made a similar amount of funding will provide fewer services and less results. Public support and even tuition charges which can be more readily changed do not keep up with inflation and the resources made available to the College are constantly deteriorated through the process. Increased resources when made available tend to come in uneven phases rather than accommodating a steadily increasing inflation.

These factors, (program costs, students to be served, state policy, and inflation) need consideration in planning for effective use of the college's financial resources in the development and support of its programs.

Capital Funds

Capital funds have been limited as well. These funds come from two major sources: state funds and local county funds. They are matched 50/50 on approved projects with the State Board of Higher Education following established (1973) facilities planning standards. Current state policy is not to fund any construction proposals over the FY 1975 approved enrollment levels. This figure for Cumberland County College is 1,135 FTE's providing quite adequately for additional projects even though actual enrollment for that year was 1,359 FTE. As of June, 1976 the State reports that the total fixed assets of Cumberland County College is $4,000,000. The State has provided a total of $1,422,455 for capital costs at Cumberland County College to complete projects totaling $2,900,976. The remainder has come from local sources; institutional sources for local funds are limited to property taxes and revenue sharing federal monies unless some specific categorical support which is not yet evident could be identified.

Since the College has received capital outlay support per student from the State at one of the lowest levels in the State, it would seem logical to expect additional capital support from the State if local matching funds are made available. The current figure is $1,253.26 per 1975-76 FTE (state funded) as compared to $2,311.55 average for the State. In other words, Cumberland County College is due consideration for capital outlay as soon as such funds are available.

Use of Available Resources

The resources of the College include the faculty and staff, the buildings and equipment, and the appropriate leadership and management activities which bring these elements into the best and most effective use of each resource.

The skills demonstrated by experienced and capable faculty can be best examined through analysis of faculty/student ratios and follow-up of students themselves. During the past few years Cumberland County College has maintained a faculty/student ratio in courses of 19:1 for 1974-75, 20:1 for 1975-76, and 24:1 for 1976-77. These ratios compare most favorably with similar institutions in New Jersey and in other states as well. Time and available facilities will limit further increase of this relationship and further notable increases should not be expected unless there is a considerable change in use of instructional technology in a number of specific ways. Increased use of teaching assistants through paraprofessionals and individualized courses will not decrease the need for well prepared professional faculty to prepare the software and work with students on a day-to-day basis.

Now instructional space is limited and intensively utilized. A total of 165 net assignable square feet (NASF) per student was built originally in the four buildings now available. This has, of course, shrunk to less than 55 NASF according to 1975-76 actual enrollment

(1,509 FTE's). In the Academic Building alone, for example, the 1975-76 space utilization study shows 17 NASF per student station being used at an occupancy ratio of 75 percent for an average total of 44.6 hours per week. The range of use was from 27 hours per week for a large (80 station) lecture hall to 52 hours per week for one of the regular classrooms.

The current spaces include four buildings:

1. The academic building includes two large lecture halls, ten special laboratories, and eleven regular classrooms. These facilities provide 833 student stations, office space for 55 faculty, an A/V room with 30 stations, a faculty conference room with 15 stations, science prep rooms, a greenhouse, a service room for student body and bookstore services. If all stations were filled at once the capacity would be less than 900 student stations.
2. The library provides study space for approximately 275 students (at 25 NASF per student). This is slightly less than the 20 percent of the total FTE which is often used as a guide for learning resources spaces. There is also office and work space for four or five faculty and staff.
3. The administration building provides office space for 20 persons. There is also a conference room and related service spaces for maid, storage, etc.
4. The student activities building includes office space for five persons, not including student offices. Also included in this building are a gymnasium with appropriate showers, lockers, and storage; a stage; a cafeteria and kitchen; a student lounge; and a student health services facility.

Outdoor athletic facilities include tennis courts, soccer, hockey, baseball, and softball fields. There is also an archery range.

5. A fifth building provides for maintenance and storage. It provides office space for the superintendent of grounds as well as shops and lockers.

These facilities cannot serve an appreciably increased enrollment. They are highly utilized at the present time and do not provide for special needs in such curriculum areas as speech, art, dramatics, and technical skills. The separation of the A/V facilities from the learning resources center complicates administration of these related services as well as effective use of them. Occupational program facilities are limited to one shop plus the special areas for nursing and business. However, space for instruction in data processing and related computer studies is very limited.

Special attention should be focused upon the learning resources center. As noted above, the current facilities are located in the academic building as well as the library. It is difficult to provide a program for students which diagnoses their problems and to prescribe appropriate individual activities for each person's improvement. Faculty development, also, is not well provided for under these circumstances; there is no place provided for materials of instruction to be prepared and for faculty to develop individualized learning packets. In short, the facilities do not encourage improvement of instruction which is common to most community colleges today. Coordination of student diagnostic services, student learning laboratories, and faculty curriculum production should be a goal in becoming more effective in achieving Cumberland County College goals and missions.

Unit Costs

As was noted earlier in this section, Cumberland County College has maintained a lower cost per FTE than most of the other colleges in New Jersey. This figure for FY 1975-76 was $1,384 in a range of costs from $1,109 up to $1,813. An analysis of college program costs shows a wide range in expenditures according to program and this is a major factor in cost per student. The state weighted average is $1,520, somewhat higher than the cost at Cumberland.

The expenditures per student for capital construction is also low when compared to other colleges in the State. Several colleges with similar FTE figures have spent three or four times as much for buildings and equipment as has Cumberland County College.

Both of these costs may be expected to increase since they are below state averages and represent deferred costs rather than savings in most respects.

Projections

Planning for the future. Using the best information currently available, the following assumptions are basic to estimating the projected need for resources:

1. The College will increase its enrollment. Depending on the degree of conservativism of the assumptions used, the College can expect only a small growth to a near tripling within ten years. A reasonable expectation, given continued commitment to educational goals now set for it and acquisition of needed resources to do so, is that the College will grow at least at an average rate of 10 percent a year.

2. The county tax base is not now growing. There is no reason to believe that this condition will change appreciably.
3. State support will increase. Program-based allocations will be of help to the College, especially in high cost curriculum such as nursing and data processing.
4. Regionalization of selected programs will require changes in charge-back procedures but this will not provide additional resources to any great extent.
5. Capital outlay limitations will result in program limitation and thereby limit expansion in certain areas.
6. Increased responsibility in Salem County may result in some additional resources.
7. Federal funds may be identified for support of selected categorical areas.

In addition to these assumptions there are several problems which must be noted:

1. State support is a set amount based upon $700 per FTE which is estimated by colleges and approved by state offices. If the College overestimates, it must return funds to State; if it underestimates, however, the College must absorb the difference. Pressure is therefore to overestimate whenever possible. This causes unnecessary loss of county aid because the College cannot go back and renegotiate the county portion of support.
2. State support is not related to program costs. High cost programs are detriments to the college financial operations in this regard.
3. State support limits non-credit programs and thereby violates basic community college philosophy to serve community needs widely. While some costs can and are absorbed in the regular budget,

non-credit programs cannot be adequately financed in that way.

4. County support is dependent upon rather complex negotiations involving a number of agencies and individuals.
5. Charge-back to other counties do not provide capital outlay funds and do not provide adequately for high cost programs.

Keeping these assumptions as well as these specific problems in mind, one can make some projections for the future as a part of the long-range plan. Rather than doing this on the basis of an expected figure of enrollment, likely trends in costs per student were developed; the rise in per student costs can be applied to whatever target enrollment is finally decided for the College as its planning efforts are carried forward.

Costs Per Student in the Future

As was noted above, Cumberland County College has maintained a relatively low cost/FTE when compared with other community colleges in New Jersey as well as those in other states. The figure for FY 1974-75 was $1,410 per FTE which was the second lowest out of the 18 colleges in New Jersey; for FY 1975-76 the figure was $1,384 in the same relative position. In both of these years the actual FTE was greater by more than 20 percent than the state funded FTE. (FY 1974-75, 21 percent; FY 75-76, 33 percent). If the State provided its full amount in relation to the actual FTE or if the local county made up the actual difference, the expenditure/FTE would be higher than is now the case. This is because both state and county provide for less FTE than the actual FTE generated at the College. To maintain a constant expenditure per FTE student applied to the larger actual

FTE enrollments observed would require larger state and local amounts. The result of the current practice, of course, is to put great pressure on for increases in student tuition and fees. This fact, complicated further by increases caused by increasing prices as well as inflation itself, makes it very difficult for any projection of costs to be fully accurate. These are some of the assumptions which might be examined:

1. All general predictions have indicated that inflation itself will cause an increase in costs equal to not less than 5 percent nor more than 10 percent per year.
2. Since energy is rapidly becoming a specific cost out of line completely with other costs of operation and maintenance, there can be an assumed increase in energy costs of not less than 1 percent nor more than 3 percent per year.
3. Many of the new programs which are needed and which will be added to the curriculum are more expensive than the existing programs now offered. The development of these programs will add to the total overall cost/FTE by a factor not easily estimated at this time. For purposes of this discussion and tentative planning, however, one may assume that the new programs will add at least 10 percent to the costs/FTE over a three year period.

There may be other factors to be considered which will increase the cost/FTE. These remain to be identified, however, and this projection will use only the three named above. The three factors identified above would add 71 percent to the 1975 cost/FTE by 1983. Briefly stated the current FY 1975-76 cost/FTE of $1,384 would increase to $2,366 within the five year period.

Another way of projecting future costs would be to examine the distribution of expenditures of Cumberland County College as compared with the state averages as is done in Table VIII-1 for two fiscal years. It should be noted that the differences between the college and the state averages are very small. There is a slightly larger portion of the budget spent on faculty salaries than in the state average. This is typical of low cost/FTE institutions, however. There are less funds spent on student services and administration than is true in the state averages. If these two items were changed, the overall costs of the College would not be appreciably changed.

The projection for budget needs in 1983 would be $2,366 for an estimated 1470 FTE students, or a total of $3,478,020 for operation and maintenance. Using current (FY 75-76) percentages the breakdown of cost burden can be expected to meet the costs as shown in Table VIII-2. It should be remembered, however, that the assumption that current proportions will continue is not necessarily assured.

The key conclusion from the above analysis of trends in per student costs is that the college's operating budget can be expected to increase approximately 10-12 percent per year for reasons other than growth in enrollment. No reductions can be reasonably expected unless the size of the institution is to be reduced. How much the likely increases over current budget levels will be, therefore, rest on policy decisions that can affect the college's growth.

Capital outlay projections are equally undependable unless one knows the varieties of ways in which building costs will increase. State policy (noted above) has already stated that there are no plans to provide funds for matching for more than FY 1975 approved enrollment levels. This figure of 1,135, however, would yield almost twice the

TABLE VIII-1

Perdentage Distribution of Educational General Expenditures, New Jersey, and Cumberland County College

EXPENSE	FY 74-75		FY 75-76	
	State Aver.	CCC	State Aver.	CCC
Instruction	47	53	46	50
Gen'l. Expenses & Admin.	23	18	23	21
Student Services	7	5	6	5
Extension & Public Service	4	4	4	4
Library	6	5	6	6
Plant	13	15	14	14
TOTAL	100	100	100	100

TABLE VIII-2

Cost Support at Cumberland County College

COST SUPPORT	FY 74-75 Amount*	%	FY 75-76 Amount	%	FY 82-83 Amount	%
State	675	35	681	31	1,078	31
Local	566	29	676	31	1,078	31
Tuition	636	33	753	35	1,217	35
Other	67	3	61	3	105	3
TOTAL	1,944	100	2,171	100	3,478	100

*Amounts in thousands of dollars

amount approved for the current capacity of 650 students--a sizeable capital outlay program in itself.

Local county bond limitations establish a ceiling of available funds. The administrator indicated a limitation of $6 million for a bonding capacity. If all of this were available for the College, it would be more than enough to match the state projected allotment for 1,135 students. However, there is at this time no agreement to provide these funds.

Cumberland County College needs $7,555,000 to finance the capital expansion of the College needed by 1983 (Fine Arts Center; additions for Student Center, Services Building, and Agriculture and Horticulture; Science and Technology Building; and athletic and physical education facilities). Depending on enrollment trends and the academic innovations adopted at the College by 1983 other new facilities may be needed as well.

Some Final Statements

The resources available to Cumberland County College have been analyzed. There is an obvious need for increased financial support in order to provide the resources needed for a program to serve the people of this area of New Jersey.

Local resources appear to be stretched to the limits. Very little increase may be expected from that source.

State adjustments may help some, especially in the areas related to programs costs and increased state FTE support.

Institutional efficiencies may be somewhat helpful. As noted, however, the College is already operating at one of the lowest costs per FTE in the State. Little can be expected from better management other than continued improvement in the quality of the program for students.

Federal sources may provide specific help in categorical areas. In order to do this, however, the following specific activities need to be incorporated into the college program:

1. Institutional Planning: There must be a considered plan to match the objectives and missions of Cumberland County College as identified in this report with guidelines and priorities of available federal programs.
2. Institutional Decision-making and Support: Cumberland County College must establish priorities among available federal programs and provide administrative support and resource allocation to those in the top priorities in order to assure probability of federal funding.
3. Knowledge and Information: A clear responsibility and authority to act on the part of personnel on the college staff is needed in order to acquire up-to-date information from federal agencies and in order to apply the requisite skill to interpret the college's program to those agencies.
4. Proposal Preparation: Cumberland County College will need to consolidate faculty and staff skills and activities to plan and write proposals that are consonant with college mission, college priorities on the one hand, and guidelines and priorities of federal agencies and private foundations, on the other.
5. External Relations: The College will need to authorize its own representation in promoting and selling its program and

proposals to the appropriate individuals in the federal and private funding agencies.

These suggestions incorporated in a college development program will provide greater assurance of success in efforts to expand sources of support for specific types of improvements at the College and, thereby, contribute to its future growth and development.

APPENDIX A

Cumberland County College Planning Committee

Anthony Abriola
Asst. Supt. of Buildings and Grounds

John Berwick, Trustee
Co. Superintendent of Schools
Bridgeton, New Jersey

Arthur Collins
Chairperson
Humanities Department

John DeYoung
Assistant Professor
Business

John Gibbs
Assistant Professor
English

Marita Lawson
Student

William Marts
Dean of Administration

Edward L. Morin, Trustee
Director of Research and Development
Seabrook Farms, Inc.

Adelaide Titus
Associate Dean of Student Affairs

Florence Volpe
Assistant Librarian

APPENDIX B

Fifteen Broad Goals for Cumberland County College Seen by Community and College Leaders

GOAL

A. To develop into a cultural center for Cumberland County, offering a broad range of programs to enrich the cultural life of the community and to enhance aesthetic appreciation of mankind's creative expression in all forms--music, theater arts, dance, visual arts, lecture series, and so on; commensurately, to acquire and develop the necessary physical and fiscal resources needed for this broad purpose.

B. To serve as a center for compilation and application of knowledge, together with appropriate information analyses, to assist in research and development related to the broad economy, units of local government, and general public of Cumberland County.

C. In cooperation with public schools of Cumberland County and other public service agencies in the County, to meet the continuing needs for post-high school education and training expressed by the adult citizens of Cumberland County for personal fulfillment, economic advancement, cultural enrichment, and general social effectiveness.

D. To develop a personnel staff to serve the College in all aspects of its operations (instruction, student services, administration, institutional support, community services, etc.) which is outstanding among public community colleges in New Jersey in terms of currency and strength of qualifications as well as commitment to community college goals and objectives.

E. To maintain high standards of academic quality in all programs offered by the College to the extent that every such program will at least meet minimum requirements set for it by appropriate educational and governmental agencies responsible for accrediting, licensing, or certifying performance in the program's specialized field (academic and/or occupational).

F. To develop and maintain a continuing structure and procedure for institutional self-appraisal and renewal encompassing regular planning, review, and evaluation of all aspects of college operations.

APPENDIX B (Continued)

G. To develop a complete response to the postsecondary educational needs of Cumberland County including programs of general education, University parallel (transfer) studies, occupational preparation, student services, and community services consistent with those typical of public comprehensive community colleges.

H. To strengthen and expand offerings of programs which prepare students for direct entry into jobs of technical and paraprofessional level in all of the broad fields of such employment (business, industry, health and other special personal services, public-civil service, etc.).

I. In all aspects of college operations, programs and services, to work in close cooperation with the County Vocational-Technical Center, the CETA-Manpower Office for Cumberland County, and the local school systems located in Cumberland County, to maximize effective program and resource development while, avoiding needless duplication of facilities and/or competitive programming.

J. To establish and maintain a continuing "market analysis" approach to determining what new accommodations Cumberland County Community College should make to meet effectively the needs of the county's citizens and general economy for postsecondary educational programs and services.
Note: By "market analysis" is meant procedures for determining such factors as manpower changes if business and industry, shifts in student interests and aspirations, changes in characteristics of county population, etc.

K. To provide optimum conditions for learning and teaching including quality of personnel, instructional resources and needed physical plant and equipment.

L. In cooperation with other collegiate and university-level institutions in the State and region, to develop for Cumberland County and Southern New Jersey an inter-institutional cooperative arrangement whereby the total postsecondary educational needs of the region will be met; within this arrangement to serve as a Learning Center, providing (beyond the usual direct services of a comprehensive community college) a coordinating and clearing-house function to enhance full postsecondary educational services in the region from the immediate post-high school level through graduate and professional levels.

M. To develop and maintain a flexible structure and approach to meeting the postsecondary educational needs of Cumberland County, including use of new media of communications, off-campus learning centers, cooperative college and community resource utilization, "open-learning" systems, and other similar techniques for decentralizing and extending the locus for learning and public service.

APPENDIX B (Continued)

N. To contribute meaningfully, consistently, and positively to an acceptance of a basic value framework by which the students of the College and the citizens in the broader community that it serves guide their individual lives.

O. To augment the New Jersey Statutory Funding Procedure with Federal, Foundation, and other private funding in those areas which will enhance fulfillment of the broad goals of the College in a cost-effective manner.

APPENDIX C

Rank Order of Goals by College Planning Committee, By Level of Aspiration and Achievement at the College

		RANK ORDER NUMBER ON:	
	GOALS	ASPIRATION	ACHIEVEMENT
A.	To develop into a cultural center for Cumberland County, offering a broad range of programs to enrich the cultural life of the community and to enhance aesthetic appreciation of mankind's creative expression in all forms--music, theater, arts, dance, visual arts, lecture series, and so on; commensurately, to acquire and develop the necessary physical and fiscal resources needed for this broad purpose.	9	14
B.	To serve as a center for compilation and application of knowledge, together with appropriate information analyses, to assist in research and development related to the broad economy, units of local government, and general public of Cumberland County.	15	15
C.	In cooperation with public schools of Cumberland County and other public service agencies in the County, to meet the continuing needs for post-high school education and training expressed by the adult citizens of Cumberland County for personal fulfillment, economic advancement, cultural enrichment, and general social effectiveness.	5	5
D.	To develop a personnel staff to serve the College in all aspects of its operations (instruction, student services, administration, institutional support, community services etc.) which is outstanding among public community colleges in New Jersey in terms of currency and strength of qualifications as well as commitment to community college goals and objectives.	10	6
E.	To maintain high standards of academic quality in all programs offered by the College to the extent that every such program will at least meet minimum requirements set for it by appropriate educational and governmental agencies responsible for accrediting, licensing, or certifying performance in the program's specialized field (academic and/or occupational).	1	1

APPENDIX C (continued)

	RANK ORDER NUMBER ON:	
	ASPIRATION	ACHIEVEMENT
F. To develop and maintain a continuing structure and procedure for institutional self-appraisal and renewal encompassing regular planning, review, and evaluation of all aspects of college operations.	8	8
G. To develop a complete response to the postsecondary educational needs of Cumberland County including programs of general education, university parallel (transfer) studies, occupational preparation, student services, and community services consistent with those typical of public comprehensive community colleges.	4	3
H. To strengthen and expand offerings of programs which prepare students for direct entry into jobs of technical and para-professional level in all of the broad fields of such employment (business, industry, health and other special personal services, public-civil service, etc.).	6	2
I. In all aspects of college operations, programs and services, to work in close cooperation with the County Vocational-Technical Center, the CETA-Manpower Office for Cumberland County, and the local school systems located in Cumberland County to maximize effective program and resource development while avoiding needless duplication of facilities and/or competitive programming.	7	9
J. To establish and maintain a continuing "market analysis" approach to determine what new accommodations Cumberland County College should make to meet effectively the needs of the county's citizens and general economy for postsecondary educational programs and services. Note: By "market analysis" is meant procedures for determining such factors as manpower changes in business and industry, shifts in student interests and aspirations, changes in characteristics of county population, etc.	12	12
K. To provide optimum conditions for learning and teaching including quality of personnel, instructional resources and needed physical plant and equipment.	3	4
L. In cooperation with other collegiate and university-level institutions, in the State and region, to develop for Cumberland County and Southern New Jersey an inter-institutional cooperative arrangement whereby the total postsecondary educational needs of the region will be met; within this arrangement to serve as a Learning Center, providing (beyond the usual direct services of a comprehensive community college) a coordinating and clearing-house		

APPENDIX C (continued)

	RANK ORDER NUMBER ON:	
	ASPIRATION	ACHIEVEMENT
L. (continued) function to enhance provision of full postsecondary educational services in the region from the immediate post-high school level through graduate and professional levels.	14	11
M. To develop and maintain a flexible structure and approach to meeting the postsecondary educational needs of Cumberland County, including use of new media of communications, off-campus learning centers, cooperative college and community resource utilization, "open-learning systems", and other similar techniques for decentralizing and extending the locus for learning and public service.	11	13
N. To contribute meaningfully, consistently, and positively to an acceptance of a basic value framework by which the students of the College and the citizens in the broader community than it serves guide their individual lives.	13	7
O. To augment the current New Jersey Statutory Funding Procedure with Federal, Foundation, and other private funding in those areas which will accrue to the greater fulfillment of broad goals of the College in a cost-effective manner.	2	10

APPENDIX D

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